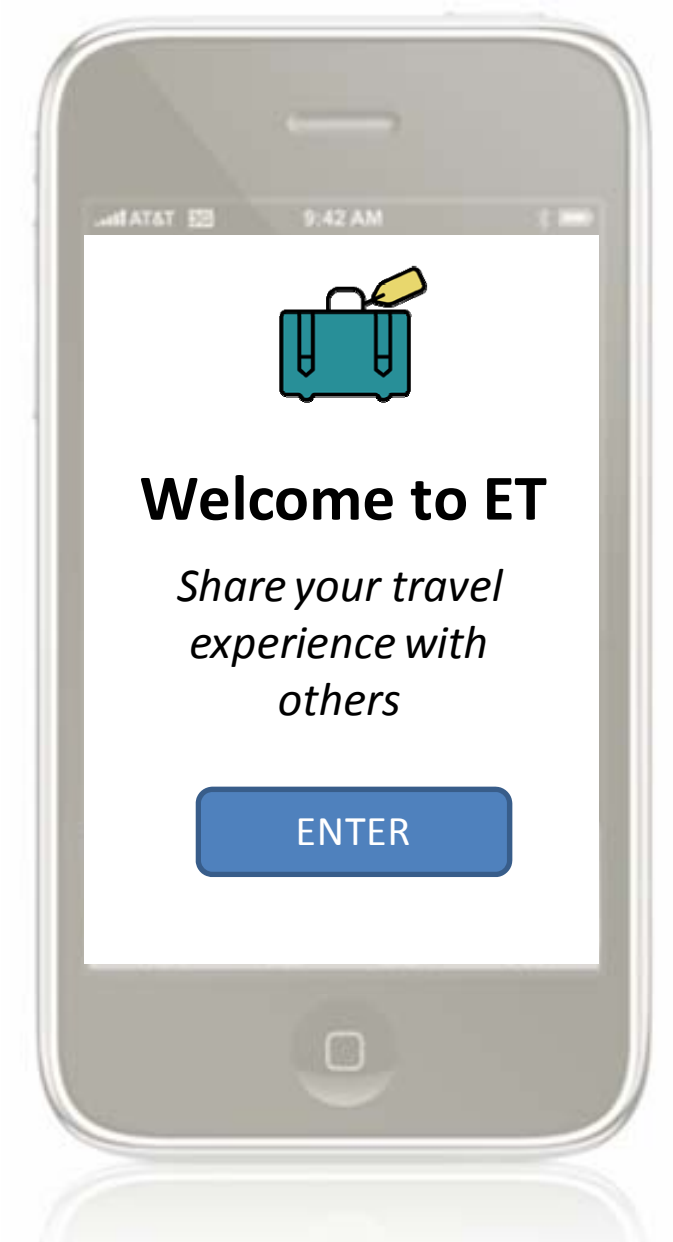
eTravel

Personality Based Tourist Information



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Human Computer Interaction I

Fall 2009

Table of Contents

I. Problem Space and Requirements gathering

A. Purpose: Product Market (audience & competitive analysis)

Background and Purpose

Travel is tied to our history as human beings. In old times, people traveled to find a new habitant to live, immigrated temporarily to have a better weather condition, and traveled to do business with other tribes. Although the essence of travel, which is moving physically to a new place for a special purpose, has not changed over time, the nature of travel has been in constant evolution. Advancements in technology have changed the way we travel. We traverse with airplanes rather than caravans and this has all added to the fast pace of today's travel. Consequently, the need for more information about the travel, including the travel medium, scheduling and destination is increasingly being demanded by travelers.

The information acquisition channels for travelers have been evolved dramatically during the last century. Information is acquired through a mix of channels. We interact with other travelers in a face-to-face conversation and ask questions; we read textual data in travel books, magazines and newspapers and trust their sources; we see images and videos of the destinations and imagine how those places look like; and finally we share our experiences with others to inform others where to go, what to do, and when to travel.

Researchers and authors have argued that the modern travel starts as soon as there is a thought about it in our minds. Wearing and Neil mention that: "Tourist behavior does not start at the time of travel, it exists before the tourist has left for the destination…" (Wearing & Neil, 2009, p203) Indeed, tourists start searching for their destination before visiting the site. Not only does this include motivation, but also when the tourist first decides which destination to visit.

Social interaction may affect the information seeking behavior about the destination. Social groups exert different effects in destination selection such as: direct persuasion, normative influence, long-term socialization leading to conventional wisdom, and social peers living in destination areas. "Social interaction involving tourists can take the form of tourist-peer group interaction which has a significant effect on destination choice." (Wearing & Neil, 2009, p203)

Previous studies (Heinström, 2003) have shown the importance of considering psychological mechanisms for a thorough understanding of users of information services. These studies have concluded that inner traits[1] of people interact with contextual factors in their final impact on information behavior. "The dispositional personality perspective depicts personality as made up by physiologically based traits, which guide behavior" (Heinström, 2003, p165). Heinström (2003) has shown the significance influence of five personality dimensions on information behavior: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness.

[1] Phares describes personality as '… that pattern of characteristic thoughts, feelings, and behaviors that distinguishes one person from another and that persists over time and situation' (Phares, 1991) Traits can be described as tendencies to behave and react in a specific way (Phares, 1991).

Personality Dimension	High level	Low level
Neuroticism	sensitive, nervous	secure, confident
Extraversion	outgoing, energetic	shy, withdrawn
Openness to experience	inventive, curious	cautious, conservative
Agreeableness	friendly, compassionate	competitive, outspoken
Conscientiousness	efficient, organized	easy-going, careless

Personality dimensions and the poles of traits they form. (Costa & McCrae, 1992: 14-16, 49)

The role of personality dimensions in information seeking behavior may have a direct implication for travelers who are seeking information about their destination as well. This will create a higher effect in social-computing interactions where the personality dimensions are less obvious for participants. In a face-to-face meeting different visual clues and behavioral elements such as cultural factors can help us to measure the similarity of others with us. This knowledge, which may be subliminal to some extent, will be deepened by experience and becoming friends with others. For example, by encountering a person who is sharing his/her experience about another location (e.g. travel destination) we may use different clues (e.g. behavior, social status, expressed ideology) to find out whether the recommendations made by him/her match our personality. If the person is easy-going and careless, an organized person may not accept his/her recommendation about the quality of the accommodation choices in the travel destination. A shy person may not like to enter a crowded beach while an energetic person may talk about his/her experience at the same beach with enthusiasm.

The current solutions available in the tourism industry have tried to address this problem to some extent. Authors of travel books frequently introduce their personality, sometimes unintentionally, so that the readers can create a sense of an attachment by finding out that the author's personality is similar enough to their own personality dimensions. Travel channel viewers try to identify themselves with the host. For example, a young energetic and confident female may want to watch a travel documentary that the host shows similar personalities of youngness and high extraversion. However, in the virtual world of computer social interaction these traits are usually ignored or invisible.

Existing social computing channels for travelers such as Expedia, Travelocity and hundreds of other travel websites include millions of reviews for different destinations. Potential tourists usually browse these websites to acquire further information about their desired destinations. Browsing or surfing reviews is a popular behavior to create a level of asynchronous social interaction among the users. However, users usually read the reviews not only to seek more information, but also to see if the author of a comment has the same personality and stand of view point as themselves. Maybe, the practice of including the reason of travel (e.g. 'I was on a business travel…') or including some of the personal traits (e.g. 'I am not that obsessive, but I found the hotel…') is a sign that reviewers and readers want to customize the comments and reviews more than simply based on location or ratings.

On a side note, it should be mentioned that location based information plays an important role in sharing and seeking information about travel destinations due to the fact that location is the most important factor in clustering the information about a special location. This fact has advanced the use of GPS enabled mobile devices as these devices can detect the location of a user automatically and ease the process of just-in-time information seeking about the current location of the user. Furthermore, small and portable mobile devices can be carried on travel without extra effort. Therefore, mobile users have the advantage to access advanced tourist information based on different criteria including their location. This makes mobile devices a suitable platform for tourism information. "Advanced tourist information systems provide targeted and up-to-the-minute data that is semantically-rich to mobile users, based on the user's preferences and location" (Hinze &Voisard, 2003, p23)

In this project, I have proposed a new location-based mobile solution. I have named the solution eTravel which stands for electronic travel. The purpose of eTravel is to provide personality trait-based personalization of tourist shared content. The customization of shared content will be integrated into a mobile location-based social sharing system which will be discussed in more detail throughout this document.

Product Market

The target market for eTravel includes a variety of users. As eTravel includes multiple perspectives of technology (i.e. mobile), social interaction (i.e. shared content) and psychology dimensions (i.e. personality traits), users can be categorized into different levels. In general, eTravel is targeted toward mobile users who demand up-to-date information about travel destinations that are shared by other users with similar personality traits. The primary user group consists of users who are familiar with small-screen handheld interaction (i.e. everyday mobile users); like the idea of virtual social networking and sharing content with others (i.e. users of social networking websites such as Facebook or MySpace); and, are willing to share their personality dimensions with others. The secondary user group includes users that are novice to either mobile interactions or social networking concepts. However, the personality dimension sharing will create a trade-off between losing potential customers and gaining attraction among others. Indeed, some users may not feel comfortable sharing or even identifying or evaluating their personality traits, while some others may like the idea to gain more targeted shared content from other users.

B. Goals: Usability and Experience

Usability Goals

The usability goals of eTravel will include the following items:

Effectiveness: eTravel's effectiveness lay in the fact that users would find the information that they were originally looking for. This necessitates that eTravel's internal application can identify

matched shared content successfully and provide it in an effective manner. eTravel should be able to connect the users, provide accurate data, and update the information proactively.

Efficiency: Clear elements and graphics will be used in eTravel. The unambiguous interface labels and text will enhance the users speed in interacting with eTravel. This will be mainly due to the lessened cognitive and physical load on the part of the user.

Learnability: eTravel will implement and employ common mobile interfaces used in mobile operating systems so that it will reduce its learning curve timeframe. Furthermore, despite eTravel's diverse functionalities, similar interaction hierarchies will be utilized to minimize the learning transition time from one function to another. Finally, the interface will be designed in a way that the user's focus will remain on the content and less on its interface. This will increase the learnability of eTravel in general.

Memorability: Users will interact with a simple and straightforward interface layout insofar as to maintain a high level of memorability. The intuitive nature and limited function of the eTravel graphics will make it easy to remember, regardless of time between logons.

Safety: eTravel deals with personal information including personality dimensions. When installing eTravel, users will be asked to consent to sharing their location-based content with others. Privacy will be an important goal to guard the safety of the users. A set of username and password will be required to login. Personal identification information will not be shared and thus shared data (e.g. comments about a specific location) will be anonymized (e.g. no first name or last name). eTravel will block users who want to use its platform for spam, abuse or any other application that may harm and/or endanger the privacy of its users.

Utility: eTravel will provide multiple options for its users to successfully customize shared content based on the personality of its users. Users can enter a desired (and available) nickname, set five dimensions of their personality, and chose an avatar to be used in the shared contents. eTravel should be able to provide a search function to the users so that they can search for a special location (or use their current location) and find photos, videos and comments shared by others for that location.

User Experience Goals

Simple and Easy to Follow: Users will not be overwhelmed by eTravel's interface. The interface will avoid using elements that does not provide any valuable information to the user or the functionality of the program.

Enjoyable: Users will enjoy eTravel by browsing the shared content about new locations and eventually by getting a sense of the desired destination. Viewing photos of the destination, watching videos of similar-minded users, and reading their comments will create an enjoyable virtual experience for eTravel users.

Interesting: eTravel will be intellectually interesting as the users will learn interesting information about new locations. The information is provided by matched users (in terms of personality) which will make it even more interesting.

Satisfaction: Depending on the user's expectation, eTravel can fulfill different promises. For example, eTravel can fulfill the expectation of finding relevant information about a specific location by providing relevant information and filtering out irrelevant data. eTravel can be rewarding and pleasing when the provided data will be experienced by the user in the destination location. For example, the user experiences a good time by going to a special location that was recommended by eTravel users.

Support of Needs: eTravel's mobile platform will enable the users to use it whenever they need it. This need becomes more demanding for travelers as they will not be able to carry large high tech devices that support social interaction with others all the time. Therefore, the portability of eTravel's hardware supports the need of the travelers.

Engaging: eTravel's personality matching system will engage the users by making them interested in comments made by certain users. This may engage the users in different levels. For example, users may follow a group of users that they find very similar to their own interests.

Proactive: Users will be enabled to proactively add to the shared content. They can add their photos, videos, and comments to different locations. They can also comment on the shared content of others. For example, a user can proactively criticize or support another comment.

C. Defining the Problem Space

Travel review websites, including travel information sources, do include shared user contents. They provide thousands of comments for places of interest or locations that they are promoting for some business reason. Website visitors spend many hours retrieving and reading the comments. In order to reduce the time spend on reviewing the reviews, some of the websites have implemented ranking and rating systems that users can use to vote how satisfied they have been with the location, business or people they have dealt with. However, the average ratings usually indicate the mean satisfaction of a normal distribution of the website users who are mainly a fair representation of the general population. The problem arises when a user tries to find shared contents (e.g. comments) that are made by users whom he/she feels have the same personality. For example, as an energetic and outgoing person, a user may be bored when they enter a city that does not have any outdoor entertainment.

eTravel will implement an open social environment where users can join a larger community of users freely without any barriers. In contrary to Facebook, where users can only share content with others after they add them as their friends, eTravel will leave all shared contents open to the larger community. For example, comments made by any of the users can be read by others. This approach is similar to what YouTube platform has implemented.

eTravel will enhance the engagement of its users by providing matched shared contents based on personality constructs. The customization will enhance the user experience in a personal level. Therefore the customization of searched information will not only be based on search terms (like YouTube's suggested videos or Amazon's suggested books to read along with the user's selection) but also personality of its users! Furthermore, in long term, users may want to follow up on certain users to find out more about new locations that they have never thought of. This will create a social environment where some of the users will be rated highly and recognized by others whom their personality dimensions match. This has been evident in other open social environments such as YouTube as well, whereas the users will follow up on certain users to see what is new. This will eventually transform eTravel to a tool to search for new travel destinations based on recommendations made by other users.

Users will sign up free on eTravel by providing a username and password. eTravel can be accessed either directly through an internet browser of a mobile device or downloaded as a mobile application (e.g. iPhone app). Upon first opening, users will consent to the terms and conditions of eTravel and that their anonymized information will be shared with others. Then, users will set their eTravel nickname, personality dimensions and avatar.

Three types of information will be shared on eTravel: textual, visual and audio. Comments can be made by users and shared among the ones that share similar personality traits. Photos can be taken by the users (via the cell phones camera) and added to the location of interest. Videos can be also recorded (along with audio) and tagged to a defined location. Searching shared content can be either by specifying a location or using the current location of the user.

Users will be able to convey they emotional status about a travel destination by textual comments or audio comments made while recording their videos. Comments made about comments, photos and videos that are posted by others will help to create an engaging factor where users will be enabled to discuss their emotional status about a place in concrete terms. The internal rating system for comments, photos and videos that are posted by other users will also help to show how other users felt about the shared content but in a more abstract approach.

Shared information in eTravel is primarily categorized based on location, because the shared content is integrated into the environment where the user collects and share the information with others. Indeed, photos and videos posted on eTravel will be collected by its users while being physically in a destination. In case of a live streaming video shared by a user, the sharing will occur while collecting the video in real time. Therefore, the physical environment of the user may affect some of the features. This may also limit live videos as Internet connection may be limited in some locations or just too expensive to roam in.

The asynchronous commenting system of eTravel can be advanced by opening a chat session with an eTravel user. The chat can be either synchronous (i.e. chatting in real time) or asynchronous (i.e. leaving messages). In both conditions both users should permit the other to open a chat session before they become able to send messages together. Chat messages will be accessible only by the users involved in it and will not be shared to the rest of the eTravel users.

D. User Target

As mentioned earlier in the purpose of eTravel, the user target can include a large section of today's society. Basically, mobile users who are interested in searching more information about travel destinations form the primary user group. In other words, the primary user group consists of users who are familiar with small-screen handheld interaction (i.e. everyday mobile users); like the idea of virtual social networking and sharing content with others (i.e. users of social networking websites such as Facebook or MySpace); and, are willing to share their personality dimensions with others. The secondary user group includes users that are novice to either mobile interactions or social networking concepts.

A semi-open interview was conducted in order to find out who will be the target users, what they will be expecting, what their needs will be, and what knowledge they currently have or may need to acquire in order to interact with eTravel.

A pre-design questionnaire was developed and administered in the interview. 8 close ended questions and 3 open ended questions were included. Please refer to Appendix A for the detailed questionnaire.

9 individuals participated in the interview (5 male and 4 female). Participants' age varied between 19 to 48 yrs. Most of the users found themselves fairly experienced with computer technology. Indeed, 7 out of 9 participants expressed that they are highly technical users; however, this has been their personal interpretation. All participants liked to collaborate in social networking although this does not imply that they are currently participating in such activities. Most of the participants (8 out of 9) liked searching for travel information about different destinations before traveling. 4 out of 9 participants currently use online chat rooms to communicate with others on a daily basis. The rest of the participants mentioned that they use the chat rooms either once a month or seldom. There were more variations when users were asked about their interest in receiving personality-matched information. 4 of them were very much interested, 2 of them somehow liked this idea, 2 of them were neutral about it and one of the participants somehow disliked the idea. Participant found the online travel information somehow unreliable. None of the users chose 'Always' or 'Usually' as online travel information being reliable. 6 out of 9 answered that they 'Sometimes' find these information reliable, 2 answered 'Rarely' and one participant did not trust the online information at all.

In summary, the close ended questions indicated that there is no obvious gender difference in the target group in regards to their technical background, social networking, travel search behavior, online chat usage, and trustworthy online information. Males were more skeptic in the usability of personality-matched information.

In the open ended questions, users explained that: Online information, TV and everyday conversation with colleagues and friends (word of mouth), were the main sources of travel information for the participants. One of the participants relied heavily on one of the YouTube channels named 'Rick Steve'. He described that he feels "…Rick's interests are so much like mine! It's like having me there." Most of participants expressed their like in using more mobile

devices while looking for travel information especially when they are actually in the middle of a travel. One user even liked the idea that his wrist watch can be used to show the information.

When asked about the idea of having a mobile based solution (such as iPhone app) participant showed a great interest in the possibilities in integrating it with different situations. They very much liked the idea of mobility but some were concerned with the interface interaction on a small screen. This was more evident in users who used their cell phones mostly for phone conversations and did not use them for other purposes. Some users mentioned that they have seen applications that provide travel information (mostly on iPhone) however they have never used them. All participants expressed the importance of interface design and usability issues in designing an application such as eTravel.

Participants were somehow confused about the question that asked about personality-based shared information. All participants, except one, asked for further explanation about the question. After further explanation, all participants showed their interest in experiencing such customizations. They mentioned open social participation (such used in Wikipedia) one possible facilitator. When asked about the barriers to share such information, some participants expressed their concerns about privacy issues involved with sharing such information.

II. Design (Conceptualization)

A. Conceptual Model (social computing model)

1. Key CMC Elements

eTravel will provide customized shared information on travel destinations based on personality dimensions. This customization will help like-minded users to find travel information easier and more effectively. The information provided by eTravel users will be mostly informal. Indeed, the formality of the shared content depends on the rating of a user by others. Communication between users may be one-to-one, one-to-many or many-to-many depending on how the user wants to use the system. For example, if the user starts a chat with another user the communication will be and remain one-to-one; while, if the user adds a comment for the public then the communication includes a note left from one-to-many.

Key computed-mediated communication elements are applied and adopted to different aspects of eTravel as follow:

- Location Aware Interaction: eTravel will utilize the GPS of cell phones to provide instant feedback based on the user's location. For example, eTravel can use the current location of the user to tag user's shared content with others.

- Mobile Interaction: eTravel will be implemented on a handheld device and therefore will provide high portability for its users.

- Comments: Users can add their own comments or review and/or rate comments made by other users. Comments will be communicated in a asynchronous fashion which will enable the users to access the information any-time any-place. This will also increase the autonomy of the users in responding to comments in desired times and accessing them in different time zones; however, message overload may be one of the problems with the asynchronous comments.

- Photos: Similar to comments, users can take a photo and associate it with a specific location. Users can also comment and rate photos taken by others. Photos are shared in an asynchronous model.

- Videos: Two types of videos can be shared on eTravel: Stored and Streaming (Live). Stored videos are very similar to photos which are shared in an asynchronous mode; however, the addition of narration (audio) and self-recordings (facial clues) will increase the possible expression of self emotions in the video. Streaming videos will be shared on eTravel at the time of recording. The live video will be shared in a synchronous fashion which will be played to public in real time. Live videos will help other users to see the destination at the current time. Live videos will be saved and transmitted in an asynchronous model after the streaming is over.

- Chat / Text Messaging: Users can initiate a real-time synchronous chat with other users. If the request to chat is accepted by the other user, the chat will start and continue in real time. If a user leaves the chat, the chat can be continued in an asynchronous mode that users leave a message for the other user and wait for a response. In contrary to general comments, chat messages are not shared with the public users of eTravel.

2. Requirements: Components / Functionality

Functional Requirements

The main purpose of eTravel, the proposed solution in this study, is to provide customized tourist information based on its users' personality dimensions. eTravel can be marketed between a wide range of cell phone users. The specific goals of eTravel are: (1) giving the user the ability to set a personality profile which includes the requirements to enter a name, choose an avatar and set personality dimensions; (2) providing the user the ability to share photos, videos and comments about a special geographical location with others; (3) filtering the search results for a given location based on personality traits of the user; (4) streaming live video of users to others if available; (5) enabling the users to chat in both synchronous (real time) and asynchronous (off time) modes; (6) providing the option to comment and rate shared contents; and (7) providing users with recommended travel deals.

Technical Requirements

eTravel is primarily designed to be used by mobile users. Technical requirements and limitations of mobile devices (e.g. iPhone) will be inherited in eTravel as well. The following list includes a

snapshot of major technical requirements: (1) unlimited data (Internet) connection in order to download the shared content; (2) high speed connection (e.g. 3G network) to display live videos; (3) integrated camera and video functionality (min 1.2 mega pixel resolution for photo and 320x240 pixel video recording capability) in order to add photos or videos; (4) integrated GPS or cellular triangulation to determine the current location of the user if necessary; (5) suitable processing speed to display the interactive map, high resolution photos, and recorded videos; and (6) integrated Google map API to depict the geographical location where shared contents are associated with.

Data Requirements

It is imperative that eTravel provides accurate data in an efficient way. In addition, eTravel should keep private data secure and make sure that shared content are anonymized properly. Specific data requirements are: (1) personal information will not be shared while personality dimensions will be used to find the best matches; (2) data integrity and location accuracy will depend on the accuracy of the cell phone's GPS and Google maps API; (3) eTravel should update the travel data, shared pictures, videos and comments on a timely manner;

Environmental Requirements

eTravel will have minimum to no direct environmental effects. No additional devices will be involved. No immediate environmental effect is expected other than those originated from the use of a cell phone. For example, high volume of video playbacks may interfere with the user's environment; however, the cell phone volume control (a cell phone requirement) can control and minimize this effect.

User Requirements

Most of the requirements for eTravel users are based on the requirements necessary for the users to operate their cell phones. Some of the user requirement can be specified as: (1) users should be able to read and write in English in a sixth grade level (current version of eTravel is only in English); (2) users should be able to operate their own cell phones (e.g. disability issues in iPhone users); (3) users are required to understand how to navigate their native cell phone operating system (e.g. able to use the built-in keyboard, camera and interface elements); (4) users need to be able to navigate Google maps or any other similar interactive digital map system (e.g. zooming and panning); (5) users should understand the concept of electronic forms and how to fill and submit them; and (6) users should be able to access high speed internet (3G or WiFi);

3. Key Scenarios

Positive Scenario

Brian is a typical family man in his fifties. He is a father of four boys. He thinks of himself as conservative, organized and to some extent obsessive. Carolyn, Brian's wife, describes him to be also very nervous if things go wrong in a vacation. Somehow contrary to Brian, Carolyn is an

energetic and outspoken person. Since last week, Brian has started to find a location that he and his wife can celebrate their thirtieths anniversary away from the boys. He has tried to find a location that includes places that will be of interest for both of them. Dave, his oldest son in his twenties, finds out about the plan and suggests Brian to use eTravel if he wants to find something interesting for both himself and Carolyn. At the beginning Brian seems to be skeptic about it. He tells David that websites have tons of information but none of the reviews and comments on these websites seems to match the needs of his situation; and indeed that he is not sure if they match their level of expectations. Brian, who is an average cell phone user, starts working with his son's iPhone and quickly learns how to work with the program. He sets up his profile and personality dimensions, types in 'Cancun, Mexico' as the destination they are considering for their vacation and quickly reviews the comments, photos and videos posted by others who are like him organized and conservative. He writes down couple locations that he likes to visit while being in Cancun. Carolyn does the same thing and comes up with a short list of points of interest. Soon both Brian and Carolyn arrange the locations that they like to see while visiting Cancun.

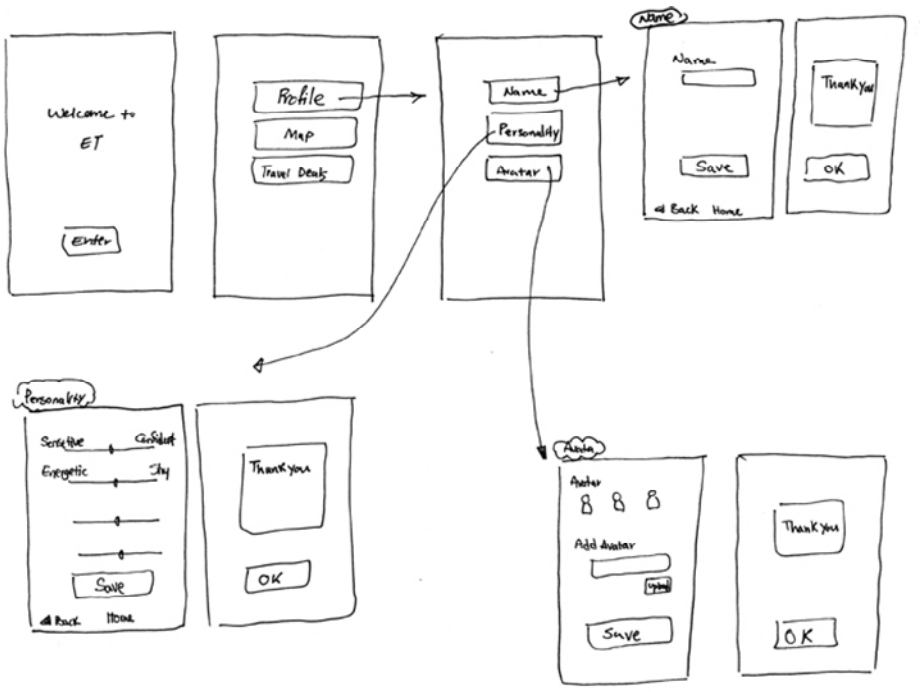
Negative Scenario

Sarah, a 32 year old Hoosier, has traveled to New York for the first time. She has recently purchased an iPhone and has loaded her cell phone with multiple travel information applications including eTravel. While browsing the travel applications, she likes the simple interface of eTravel but she is not sure how to run the camera properly. When she arrives in Big Apple, she becomes very excited while visiting the statue of Liberty. She goes on a tour to visit the upper levels of the statue. She has just couple minutes to make a recommendation on eTravel. She decides that a video of her will be the best option due to lack of time in writing a comment. She opens eTravel, clicks through the menus, searches for her current location, clicks on 'Add a Video' and tries to operate iPhone's video as soon as possible. While struggling to take her face-shot in the video and make a video comment about her experience, her novice experience with the iPhone video system makes her to cancel and record a video again and again. In the quick search of iPhone video options she mistakenly clicks on live video without knowing of the recording process being initiated while making profound comments about her new iPhone. After, getting back from the statue's tour, when she checks to see how the system works, she suddenly realizes that her entire argument with her own cell phone has been streamed on eTravel and also recorded. She immediately removes the recoded video from eTravel but she is now embarrassed about her video and what other users may have seen in the live feed.

B. Prototype Design & Development

1. Paper Prototype

Please see Appendix B for detailed paper prototypes.



Sample paper prototype: Setting the Profile

2. Cognitive Walkthrough

Before conducting a formal user study, a cognitive walkthrough was performed in order to accomplish a usability inspection and identify usability issues in eTravel. I focused on how easy it is for new users to accomplish tasks with the system. As depicted in the paper prototypes, eTravel starts with a welcome page and introduces the user to three areas of 'Profile, 'Map' and 'Travel Deals'. By choosing 'Profile', the users have the option to choose any of the items of 'Name', 'Personality' and 'Avatar'. In 'Name' the user enters his or her name, in 'Personality' the user sets his or her personality dimensions, and in 'Avatar' the user selects his or her desired avatar to be used in eTravel. 'Map' will take the user to the desired destination. Destination can be either entered by the user or can be set as the current location of the user (if the phone is equipped with GPS). When the map appears, shared pictures, videos and comments of other users who happen to have the same personality dimensions will appear on the map. Then, the user can see or add any of the pictures, videos or comments. The user can even chat with any of the eTravel users if the other user permits. Finally, the user has the option to browse the latest travel deals that are recommended by other users by clicking on 'Travel Deals'.

Based on eTravel's general purpose, target market, pre-design interview results and user targets, the following general tasks were identified to be suitable for a walkthrough of the 'Personality Based Tourist Information' (eTravel) system:

- Task1: Setting the Profile
  - Entering name

  - Setting personality traits
  - Choosing an avatar

- Task 2: Searching the Map and Sharing Content
  - Search for a new place
  - Browse a picture / Add a picture
  - Watch a video
  - See a comment / Add a comment

- Task 3: Browsing Travel Deals

Cognitive walkthrough was accomplished by one participant (33 yrs, male). The set of tasks was given to the participant and he was asked to think aloud and provide feedback for each of the sections. The participant was observed and new recommendations were made based on these findings.

Cognitive Walkthrough Results

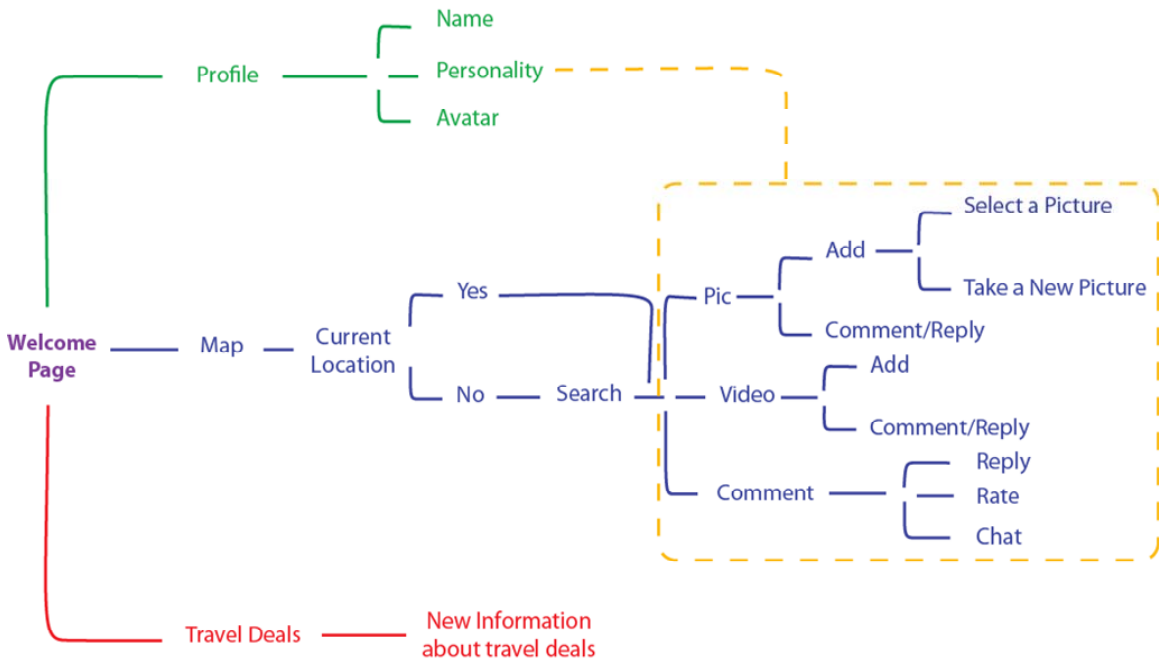
Task 1: Setting the Profile
Observation → The user did not like the idea of entering address and status
Recommendation → Address and user status were removed from the profile due to privacy concerns. Only name, personality dimensions and avatar remained.

Task 2: Searching the Map and Sharing Content
Observation → The user found it hard to enter his current location especially if he doesn't know where he is right now
Recommendation → It was decided to give an additional option to the user to choose his current location instead of typing the location. Of course, this requires integrated GPS and may be of privacy concern.

Task 3: Browsing Travel Deals
Observation → The user did not want to have only travel news in this section
Recommendation → Travel deals (that may be recommended by other users) were added to this section.

Schematic of eTravel

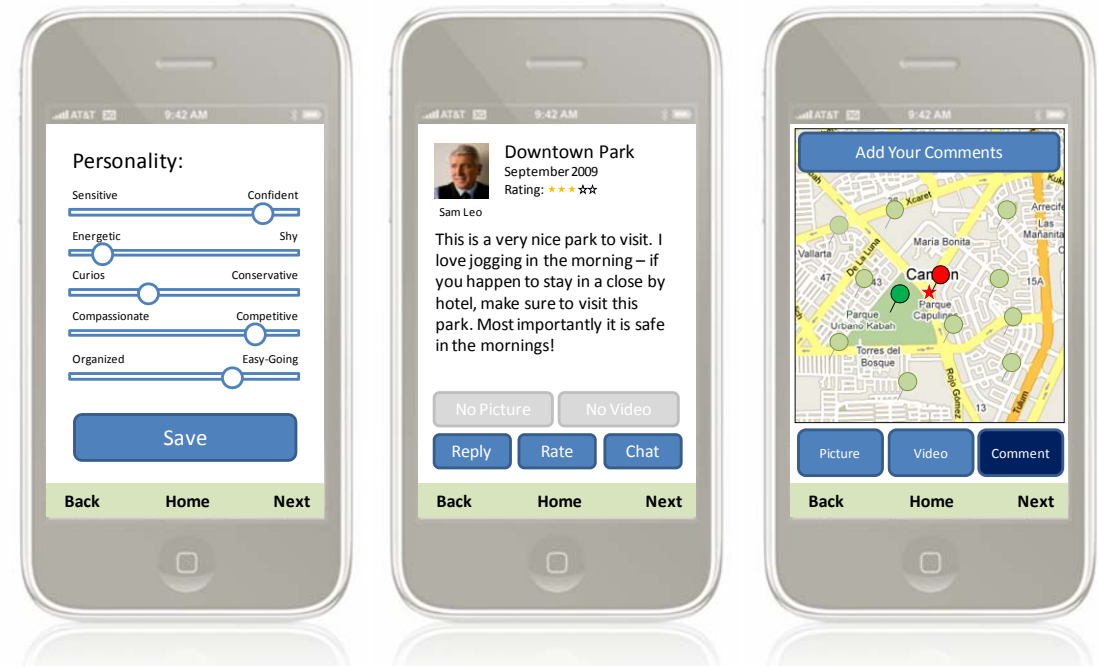
Based on the requirements identified in the conceptual framework and the results of the cognitive walkthrough, the following schematic of eTravel's functionality was proposed. The schematic view of eTravel's functionality provides clear information about the hierarchical structure of eTravel's modules and components. The dotted line shows the customization of the results based on personality settings available under the profile options.



Functional Schematic of eTravel

3. Dynamic Prototype

After sketching the low fidelity prototypes (wireframes) and applying the results of the cognitive walkthrough, the high fidelity prototypes were produced using Adobe Illustrator and Microsoft PowerPoint. Interactivity was embedded in the PowerPoint slides so that test users can navigate through different options offered by eTravel.



Sample screenshots of the high fidelity prototype

Please refer to Appendix F for further screenshots of eTravel's high fidelity prototype.

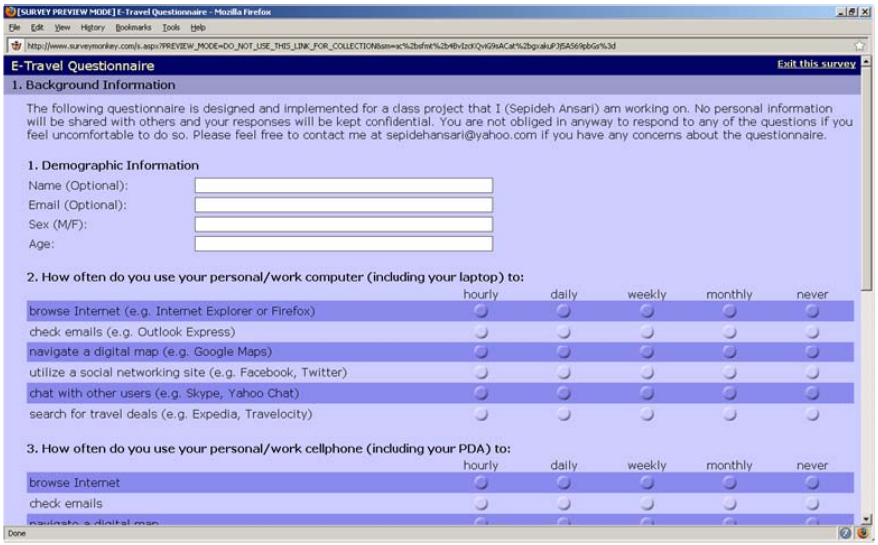
Please refer to http://sunwebspace.com/backup/etravel_prototype_final.ppt for the functional interactive and dynamic prototype.

III. Validation (Product Assessment)

A. Usability Study Findings

A user experiment was conducted to evaluate the proposed eTravel interface. As discussed before, based on the conceptual design and initial prototypes, 3 tasks were identified to be completed by the users: (1) Setting the profile; (2) Searching the Map and Sharing Content (which included multiple subtasks); and (3) Browsing Travel Deals. The user experiment was mainly focused on the users' feedback, both qualitatively and quantitatively, on the defined tasks. 15 users were contacted by email and phone; whom 13 of them agreed to participate. 2 of the potential participants did not have the time to participate. 5 of the participants were males and 7 females. Average age of participants was 36.4 years; however, the standard deviation was 11.3 years. Minimum age was 28 and maximum 70 years.

A formal invitation letter was sent to all 13 participants and they consent to the terms and conditions of the study. In the invitation letter, a link was provided to download the high fidelity interactive prototype which was hosted online. As discussed before, the interactive prototype was designed in PowerPoint. Study directions were also provided in the invitation letter and a report sheet was also provided to the participants. Participants were asked to perform all of the 3 tasks and provide their qualitative feedback on a report sheet (i.e. Task Error report). In addition to the descriptive feedback, an online survey was conducted to collect more detailed information about the participants' demographics, background information, preferences and usability evaluation of eTravel. The online survey was hosted on SurveyMonkey.com (a free online survey website) (available at: http://www.surveymonkey.com/s/WPTY77J). After the online questionnaire, participants were interviewed to collect more qualitative feedback about eTravel's interface.



Sample screenshot of the online questionnaire

It should be stressed that the results are only post-test conclusions and there was no experimental design in the user experiment. Indeed, there was no control group to compare the results with; and therefore, these results have limited external validity. However, these results will give us a general overview about eTravel and future areas of improvement.

1. Task Error

Users were provided a sheet to report any errors they may encounter for any of the tasks. The users were also encouraged to provide any qualitative feedback they may have to improve any of the tasks. The following is a summary of the task error report:

Task 1: Setting Profile

Most users liked how they can setup their profile and had minimum problems (and no errors) in setting up their name, personality profile and avatar. Most users were satisfied with the hierarchy of the profile module.

Task 2: Browsing Map and Sharing Content

Most users found it easy to navigate. Some users had a hard time to find the 'Add' buttons (pictures, videos or comments). Two errors were recorded due to incorrect assumption that clicking on the 'Picture' button or clicking on a random place on the map will provide the users the option to add a new picture. Indeed, these users were not able to find the large 'Add' buttons for pictures, videos or comments on the top of the map.

Task 3: Browsing Travel Deals

Most users found it very simple to navigate. No errors were recorded.

2. Post-Task Questionnaire

The online post-task questionnaire included multiple sections: Demographics, Background Information (computer and cell phone experience), Personal Preferences, Usability of eTravel, and some Open-ended Questions to collect user opinions after the test (this is different from either the task error report or the post-test interview).

Demographics

Name (Optional), Email (Optional), Sex (M/F) and Age was asked in this section.

Background Information

How often do you use your personal/work computer (including your laptop) to? (hourly, daily, weekly, monthly, never)

- browse Internet (e.g. Internet Explorer or Firefox)
- check emails (e.g. Outlook Express)
- navigate a digital map (e.g. Google Maps)
- utilize a social networking site (e.g. Facebook, Twitter)
- chat with other users (e.g. Skype, Yahoo Chat)
- search for travel deals (e.g. Expedia, Travelocity)

How often do you use your personal/work cell phone (including your PDA) to? (hourly, daily, weekly, monthly, never)

- browse Internet
- check emails
- navigate a digital map
- utilize a social networking site
- chat with other users
- text message others
- search for travel deals

Personal Preference / Evaluation

Likert scale questions (Strongly Agree, Agree, Somehow Agree, Neutral, Somehow Disagree, Disagree, and Strongly Disagree):

- I consider myself experienced with technology
- I can usually find what I am looking for on Internet
- I like social networking (e.g. Facebook, Twitter)
- I share web content (e.g. pictures, videos, comments) with others frequently
- I would feel comfortable to chat online with people that I don't know
- I don't mind to put my information online

- I think web content can be customized based on user's personality traits
- Others emotions and opinions such as comments and ratings are important to me
- I like to search online about new places before I travel
- I like visual information rather than textual information

Usability Evaluation

Likert scale questions (Strongly Agree, Agree, Somehow Agree, Neutral, Somehow Disagree, Disagree, and Strongly Disagree):

- eTravel can be an effective tool to share information about a new location with others
- eTravel can be a time efficient solution in sharing information about a new location with others
- eTravel menu items and commands are easy to remember
- eTravel can be learned quickly
- Overall I am satisfied with the design of eTravel

Qualitative Open Ended Questions

- Do you like the idea of collaboration with other users through eTravel?
- Do you like the idea of customizing content sharing based on personality dimentions through eTravel?
- Which of the content materials (comments, pictures or videos) do you prefer to share on eTravel? Why?
- What other features you would like to have regarding the social experience with eTravel?

Summary of the Results

Demographics → User experiments were conducted with 13 users: 5 Males and 7 Females; Age: Average 36.4, Standard Deviation 11.3

Background Information (Computer Usage Background) → The usage frequency of browsing the internet and checking emails are more than other items such as navigating the map, chatting or searching for travel deals. Indeed, the users browse the internet almost on an hourly basis while they chat with others more or less on a weekly or monthly basis.

Background Information (Cell Phone Usage Background) → It is almost the same results as in the computer usage background. For instance, in the case of cell phones text messaging and internet browsing are more popular among our users than navigating a map or searching for travel deals. Users showed much more interaction history with computers than cell phones.

Personal Preference / Evaluation → The most important finding was that users were somehow neutral to the idea of customizing information based on their personality traits. This was partly due to the users' concern about privacy information and if the personality dimensions will be shared with others.

Usability Evaluation → Users evaluated the usability aspect of eTravel very high in almost all dimensions. There were no disagreements about the positive usability of eTravel. However, it should be mentioned that this is a limited questionnaire to evaluate the usability of eTravel and a more comprehensive experimental users study should be constructed in future to measure the true usability elements of eTravel.

Qualitative Open Ended Questions → In general all users like the idea of collaborating with other users through eTravel. They also like customizing the shared content based on personality dimensions; however they were concerned about privacy issues. Users were divided about the type of the content (between picture and comment) they like to share. When asked what they like to add to eTravel, most of the users like the idea of being able to browse based on 'Points of Interest' categories such as restaurants, hotels, shopping malls and etc to find more specific location in a given location. They liked to see the shared content about each of these locations.

Please refer to Appendix D for 'Usability Test Results' and Appendix E for 'Test Subject Profile Information'. Additional diagrams, depicting the results in much more detail, are included in these appendices.

3. Interview

The interview was conducted after the test. Users had various comments which the most important ones are listed below.

User A

"I like to see the form box being grayed after I am finished typing in it".

"It seems that age and gender are missing in the profile page. Maybe having the marital status can help as well. I guess all of these factors may influence how people think about something. I mean these factors affect how they comment"

"What about privacy? Shouldn't be somewhere that I consent to share my information? After all, it's my personality dimensions!"

User B

"If somebody wants to have more pictures [by adding them] for a location then nobody can see the map itself"

"I don't like the idea of showing all of the pictures on the map at once. It's confusing for me. Some of them are larger and some of them are smaller. I like to see a list or a table of all of the photos that I can browse and then the map shows me where the picture is."

"Maybe you can build your own map so that you won't be limited to Google!"

User C

"The font in the 'Travel Deals' section is too small. I need my glasses to see them. Having pictures for each of them is also nice."

"Make sure that users can edit or cancel their comments. I didn't see any option that let me see my past comments. What if I want to delete one of them?"

"Can I create a circle of trusted friends? I mean, that nobody can see my comments that are only open to my friends. I mean something like Facebook."

B. Summary of Product Assessment

1. Problems with the Product

After categorizing the problems identified by users in the final user experiment, two major groups of problems were identified: Usability and Value related problems. Usability issues were mostly related to user interface issues while value issues were concentrated with the concept of sharing the personality issues and moral issues involved with it. Another group of problems, Study Limitations, were also added due to the nature of the user experiment.

In term of usability, users asked for interface changes such as moving around some of the buttons (e.g. 'Add Photo') or having a highly interactive map. They also asked for 'Points of Interests' so that they can browse based on certain categories; which will increase the functionality of eTravel.

In terms of value related issues, users were concerned about privacy issues and asked for informed consent and having the option to join or leave certain trusted groups such as creating friends.

Major usability issues identified with eTravel

- Users were not able to find the 'Add' buttons
- Users asked for higher interactivity in the map
- Users liked to include 'Points of Interests'

Major value related issues identified with eTravel

- Users were concerned with privacy issues
- Users proposed to have a consent form
- Users asked for trusted group of members (e.g. friends)
- Users suggested adding age, gender and marital status as well
- Users asked for an option to delete or edit previously posted comments or photos

Major study design limitations

- Survey questions are not standardized and their internal validity is not tested
- The survey questions were sometimes easily overlooked by users
- Sample size of the users may have skewed the results due to their background information and personal preferences
- Study design (pre-post-intervention) did not include a control group
- 'Task Instructions' should have a certain granularity
- Too much detailed instructions are not suitable for usability testing

2. Recommendations for Future Development

There are several approaches to further develop eTravel. Basically, the major problems listed in the previous section should be identified and fixed.

Some of the usability issues can be fixed and/or improved quickly. For example, if a certain button is not recognized by the users, then a change in interface or the hierarchy of the interactions should make it more visible and accessible. Nevertheless, some of the improvements are more challenging and require a more elaborate change. For example, adding 'Points of Interest' require a complete overhaul of the new schematic design in the 'Map' section of eTravel.

A neglected factor in this research was the import of 'Value-Sensitive Design'. Researchers (Friedman, Kahn, & Borning, 2006) have long discussed the import of value and moral in human computer interaction design. There are several value-sensitive fronts that can be improved: considering the privacy issues; ability to create groups of friends and trusted users; enabling users to have control of whom their sharing their content with; including a consent form while signing up with eTravel; and, integrating existing social networking website such as Facebook, Twitter and MySpace.

Developing a functional prototype will enhance the user experience insofar as it may produce new usability issues. Currently users are sitting in front of a personal computer and taking the test in a PowerPoint simulated prototype; however, a real cell phone prototype may reveal new usability issues in regards to environment, mobility and etc.

A true experimental design (treatment and control) is recommended in future research designs to evaluate the effectiveness of eTravel in more detail. These results will also assist the research in finding better definition and utilization of personality dimensions and value sensitive design in the context of social mobile computing interactions.

IV. Appendix

A. Initial Product Abstract

In order to evaluate the problem space and analyze the potential user expectations a preliminary per-design questionnaire was designed and administered in an interview. Interviews were conducted in a face-to-face and over the phone conversations.

Pre-Design Questionnaire
The pre-design questionnaire included 8 close ended questions and 3 open ended questions.

Close ended questions included the following items:

(1) How old are you?
(2) What is your gender?
(3) What is your technical experience level? High, Medium or Low.
(4) Do you like to collaboration and participate in social networking? Very much, Somehow like it, Neutral, Somehow dislike it, Not at all
(5) Do you like to search for destination information before traveling? Very much, Somehow like it, Neutral, Somehow dislike it, Not at all
(6) Do you use real time online chat environments? Every day, Once a month, Seldom, Never
(7) Are you interested to receive personality-matched information? Very much, Somehow like it, Neutral, Somehow dislike it, Not at all
(8) Do you think you can find reliable information online? Always, Usually, Sometimes Rarely, Never

Open ended questions included the following items:

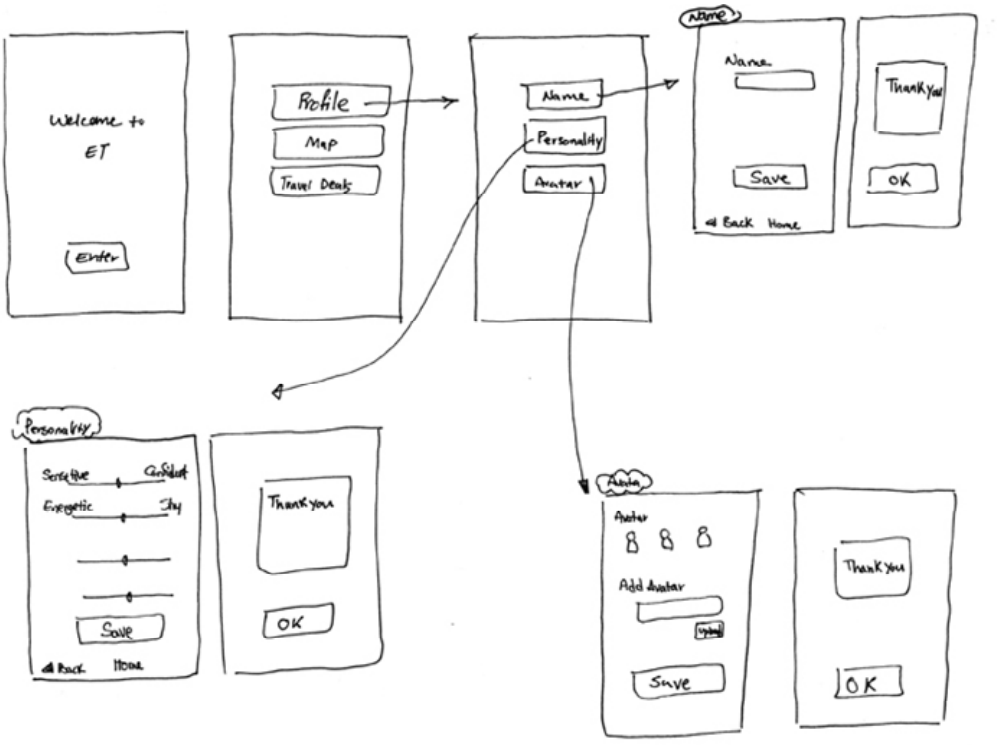
(1) How are you going to find more information about your next travel destination? What information mediums will you try to use? What technologies are you going to use?
(2) If a mobile solution can provide you with travel information about a destination, what issues do you think it should consider? What usability issues come into your mind? What about the interface?
(3) How can the idea of sharing information based on personality dimensions be improved? What barriers do you see? What facilitators can be applied?

Pre-Design Interview Results

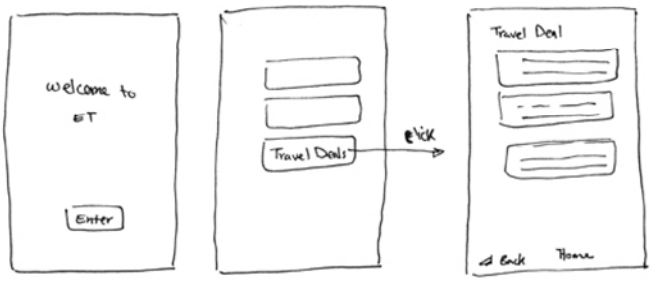
Topic / Item	Result
Number of participants	9 (5 male, 4 female)
Ages of participants	19, 29, 30, 33, 33, 37, 38, 42 and 48
Technical experience	High (7), Medium (2), Low (0)
Online collaboration or social networking	Very much (7), Somehow like it (2)
Online search for travel information	Very much (8), Somehow like it (1)
Online real time chat	Everyday (4), Once a month (3), Seldom (2), Never (0)
Interest in personality-matched information	Very much (4), Somehow like it (2), Neutral (2), Somehow dislike it (1)
Reliability of online information	Always (0), Usually (0), Sometimes (6), Rarely (2), Never (0)
Acquiring travel information	"TV is OK but I like to surf the web. There are a lot of things that you can't find on TV. Let's say you are looking for a special place. TV doesn't give you that information." "When I was younger, there was no Internet. So I used to ask the travel agents. I literally had to walk to a travel agency and ask them what they recommend. Internet has changed the entire process. I search for places that I have no idea about, book my flight and hotel and even my cab!" "I have a large family. There is usually somebody that has been somewhere. I tend to ask my relatives. They understand me much better and so will recommend me things that work out for me. Well, I also have to admit that sometimes I double check what they say with online information!" "I use different outlets; however, I like this guy on YouTube. His channel is called 'Rick Steven'. He looks so much like me [smile]. He goes to places that I like to see too. For example he usually likes to tour the architectural monuments which I like so much."

Mobile solutions for travel information	"I like the idea of having it all on my cell phone. I actually use my cell phone to browse Internet, check emails and play games." "Well, frankly, I don't use my cell phone that much. I do have a cell phone but it's only for emergencies. Can you make it working on a cell phone? I need to have my glasses to work with it!" "Actually I do have an application on my iPhone which is quite similar. Look here it is.... I don't know. But it seems that all of the information in this app is only coming from the big corporations. You know it's all about advertisement." "I think you have to design an interesting interface if you want to sell it. People like smooth and simple graphics. I like it too."
Personality-matched information	"I think it's a good idea, but how are you going to do it. Are you going to ask me about my personality?... Well, it may work. I am not sure, but it is interesting. After all I am very organized and like to hear from organized people." "Thanks for the additional explanation. I think the most important barrier is that users will be willing to share such information" "You can do it like 'Wikipedia'. Just make it open to everybody. This way a lot of privacy issues will be resolved"

B. Paper Prototype Sketches

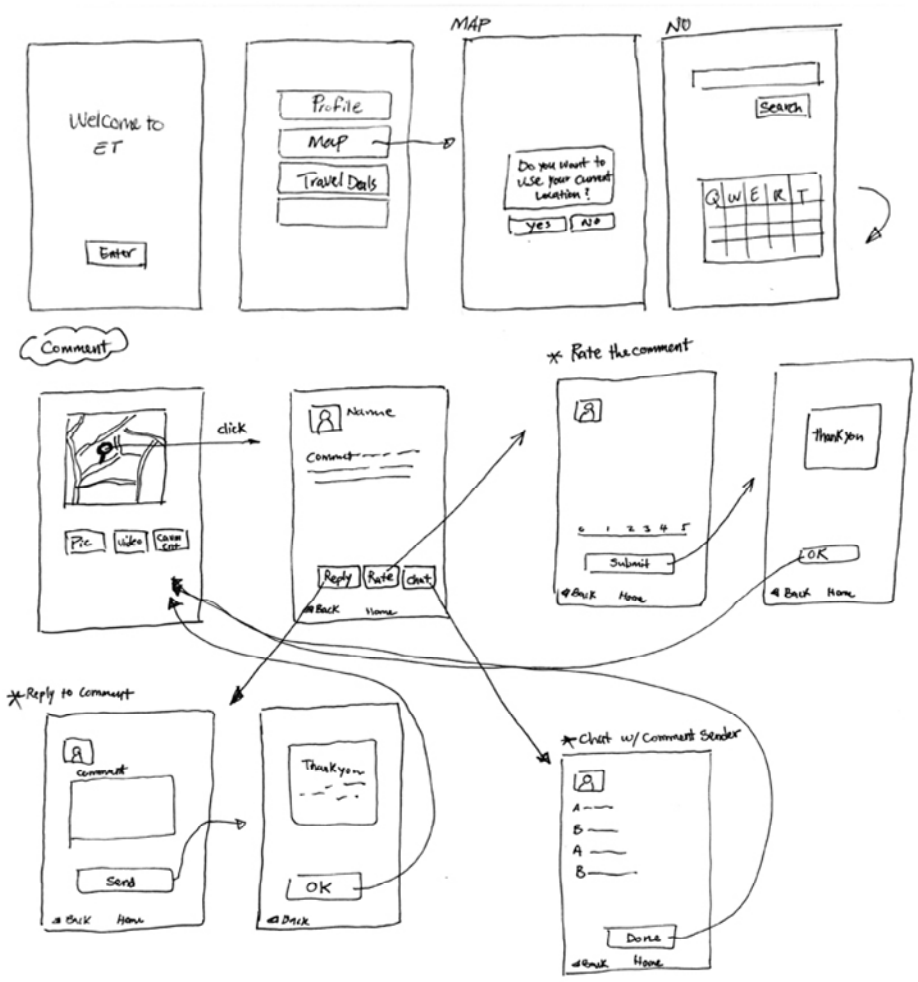


Task 1: Setting the Profile

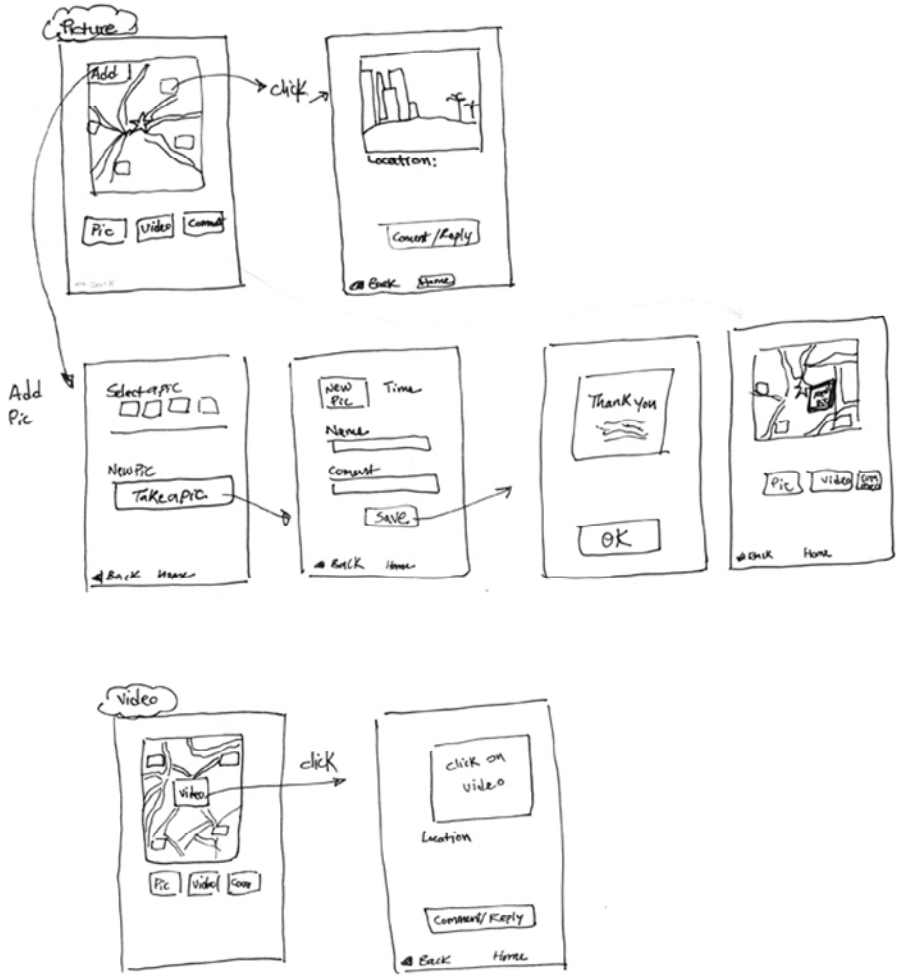


Task 3: Browsing Travel Deals

This slide shows task 1 and task 3 of eTravel. In task 1, three options are available: entering the name, setting the personality dimensions, and choosing an avatar. Task 3, which is a simple task, helps the user browse recommended travel deals based on the users search history.



Task 2: Browse the Map → Retrieve a comment and respond



Task 2: Browse the Map → add a new picture to a location

This slide shows task 2, which is an extensive task with multiple subtasks. Three major subtasks involved with browsing or adding pictures, videos and comments. All of the shared content from other users will be customized based on the matching process of personality dimensions of the authors and the user.

C. Cognitive Walkthrough Feedback Form

This walkthrough was performed by one of the graduate students and me on the dynamic prototype. The form was used for this walkthrough is presented below.

You are a person named William and want to travel but you are not sure where you like to go. You have an iPhone and you have heard about eTravel which is an application that can run on your iPhone. In this application you can set up your profile and based on your personality traits you will access information which is uploaded by other users who have similar personalities. You download the application on your iPhone and you log into eTravel.

Task1: Setting the profile
Observation
Recommendation

Task 2: Searching the Map and Sharing Content
Observation
Recommendation

a) **Search for a new place Browse a picture**
Observation
Recommendation

b) **Add a picture**

Observation
Recommendation

c) **Watching a video**
Observation
Recommendation

d) **See a comment**
Observation
Recommendation

Task 3: Browsing Travel Deals
Observation
Recommendation

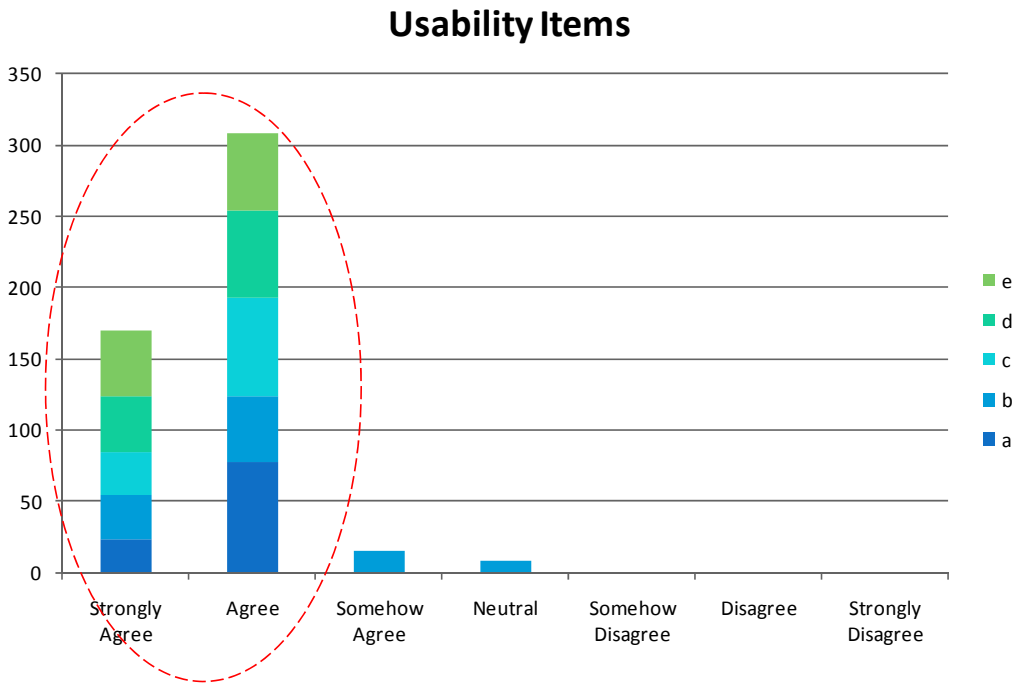
1. What was your overall opinion of eTravel?
2. What suggestion do you have to improve eTravel?
3. What were the specific problems that you found with the usability of e Travel?

D. Usability Test Results

An invitation letter was sent to 15 users. 13 users agreed to participate in the study. A list of tasks was provided to each user. User experiments were conducted with 13 users: 5 Males and 7 Females; Age: Average 36.4, Standard Deviation 11.3

Users performed each of the tasks using the high fidelity interactive prototype. After each task, users filed a report sheet indicating any errors found and providing suggestions to improve the interface. At the end of the study, users responded to an online questionnaire and also interviewed for additional feedbacks. The questionnaire was made in Surveymonkey.com and was administered after the interaction with eTravel. The questionnaire had different groups of questions.

The online questionnaire included a simple usability section. One question was included for each dimension of effectiveness, efficiency, learnability, memorability and satisfaction. The list of the questions is shown in the next table. The result diagram shows that the users evaluated the usability aspect of eTravel very high in almost all dimensions. There were no disagreements about the positive usability of eTravel.



Usability Results (Please refer to the next table for questions)

#	Question
a	eTravel can be an effective tool to share information about a new location with others
b	eTravel can be a time efficient solution in sharing information about a new location
c	eTravel menu items and commands are easy to remember
d	eTravel can be learned quickly
e	Overall I am satisfied with the design of eTravel

Usability Questions

E. Test Subject Profile Information

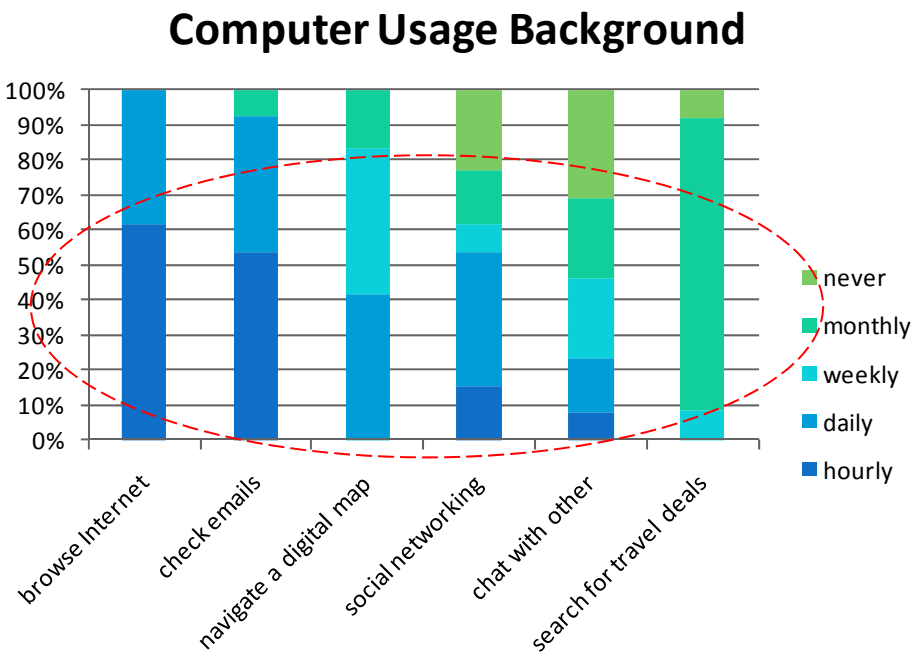
Background Information

Background information was collected through two sections of 'Computer Usage Background' and 'Cell Phone Usage Background'. The following diagrams compare the background of the users in terms of their usage of personal computers versus cell phones.

For example, as shown in the first stacked column diagram, titled 'Computer Usage Background', the usage frequency of browsing the internet and checking email is more than other items such as navigating the map, chatting or searching for travel deals. Indeed, the users browse the internet almost on an hourly basis while they chat with others more or less on a weekly or monthly basis.

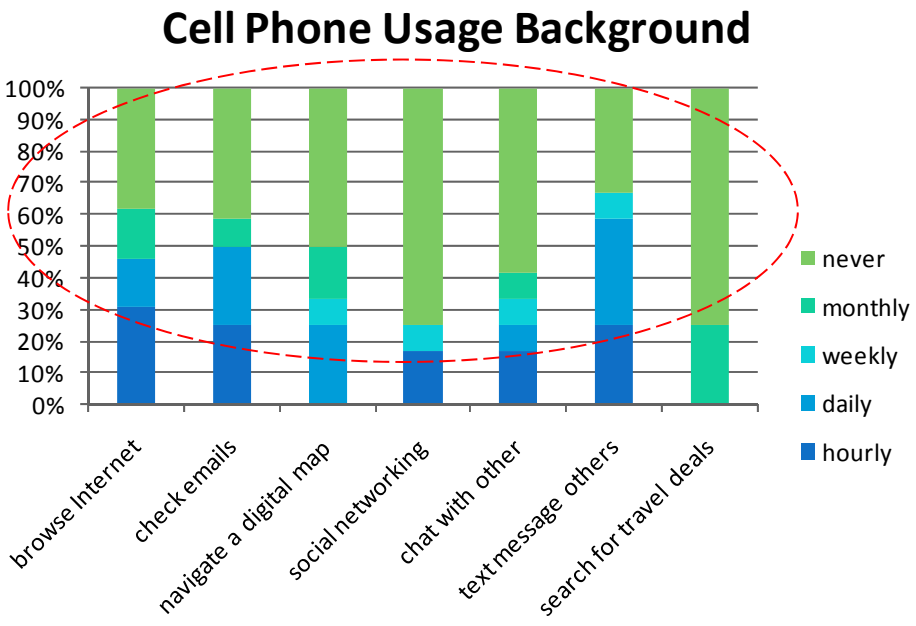
The lower stacked column diagram, titled 'Cell Phone Usage Background', shows almost the same items for cell phones. For instance, in the case of cell phones text messaging and internet browsing are more popular among our users than navigating a map or searching for travel deals. By comparing both diagrams together, it is evident that the users in this study had much more interaction with computers than cell phones. This is shown by the red-dotted circles overlaid on the diagrams.

How often do you use your personal/work computer (including your laptop) to? (hourly, daily, weekly, monthly, never)



Computer usage background based on time of interaction per day

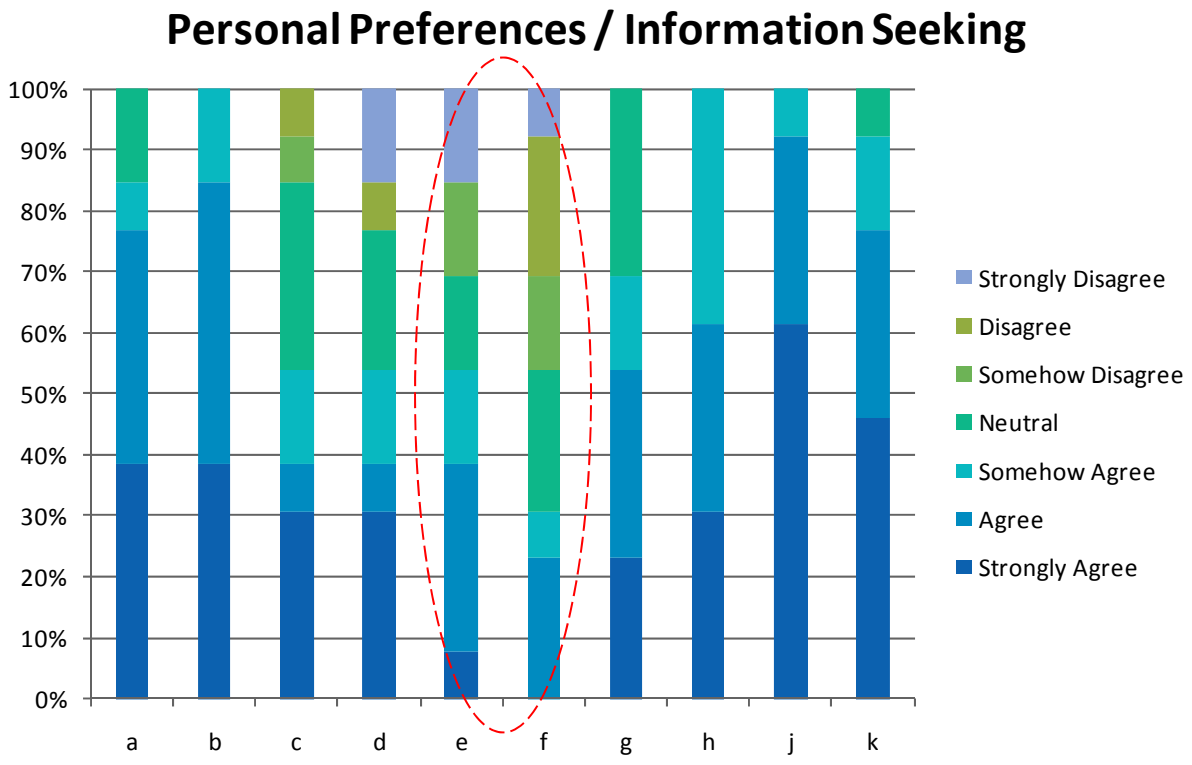
How often do you use your personal/work cell phone (including your PDA) to? (hourly, daily, weekly, monthly, never)



Cell phone usage background based on time of interaction per day

The next question was regarding the personality related information seeking behaviors of the users. It was interesting to know what personal preferences the users have and what values are important for them. I collected different social-behavior value sensitive design issues that might be important for eTravel. The items are listed as 'a' to 'k' in the followed table. Of course, this list is not inclusive at all and I have not tested it against any other group. I collected these items from different articles that were involved with social computing and personality dimensions.

'A' and 'B' in the diagram show that the users were considering themselves experienced with technology, and skilled in finding information online. 'C' and 'D' indicate that the users were comfortable with social networking and sharing content online; however, there was some opposition in the group to this idea. 'E' and 'F', marked by the red-dotted circle, depict an important issue with the moral values of the users who did not want to give up their personal information or chat with unknown people. This is very important in future developments of eTravel to create a trust between users by defining trusted member groups and friends. 'G' and 'H' show that users were somehow neutral to the idea of customizing information based on their personality traits. This was partly due to their concern about privacy information and if the personality dimensions will be shared with others. In addition, four of the respondents did not understand what 'G' and 'H' mean, so they chose the neutral position. Finally, 'J' and 'K' represent the high interest of this user group in looking for online content regarding their travel plans.



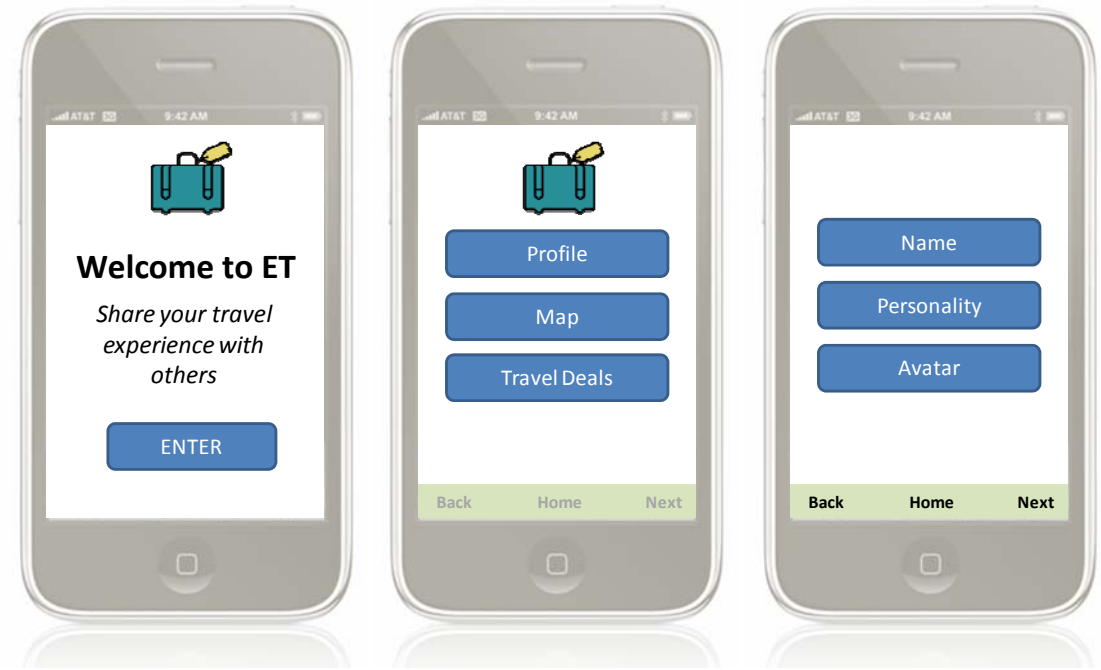
Personal preferences in travel information seeking (Please refer to the next table for questions)

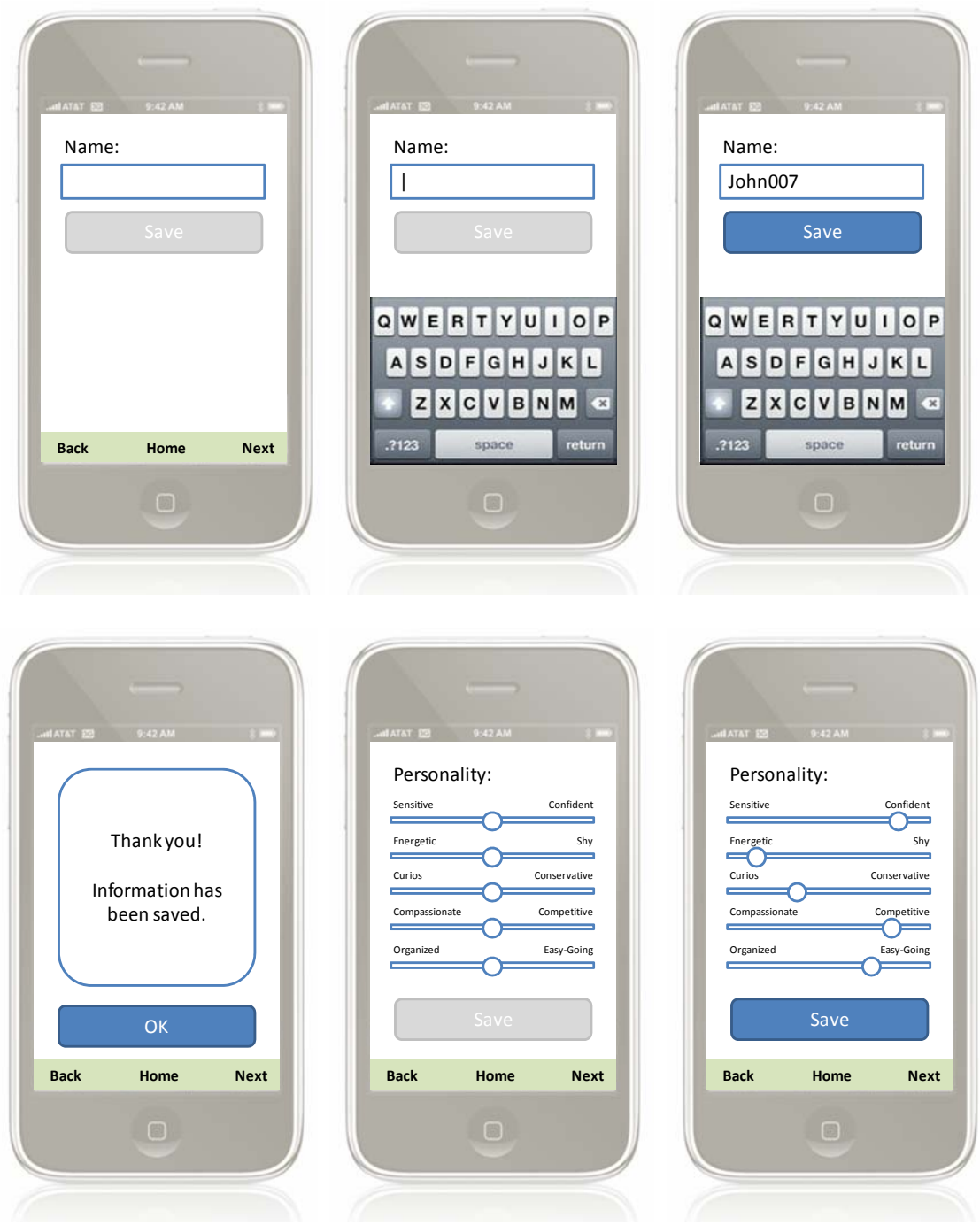
#	Question
a	I consider myself experienced with technology
b	I can usually find what I am looking for on Internet
c	I like social networking (e.g. Facebook, Twitter)
d	I share web content (e.g. pictures, videos, comments) with others frequently
e	I would feel comfortable to chat online with people that I don't know
f	I don't mind to put my information online
g	I think web content can be customized based on user's personality traits
h	Others emotions and opinions such as comments and ratings are important to me
j	I like to search online about new places before I travel
k	I like visual information rather than textual information

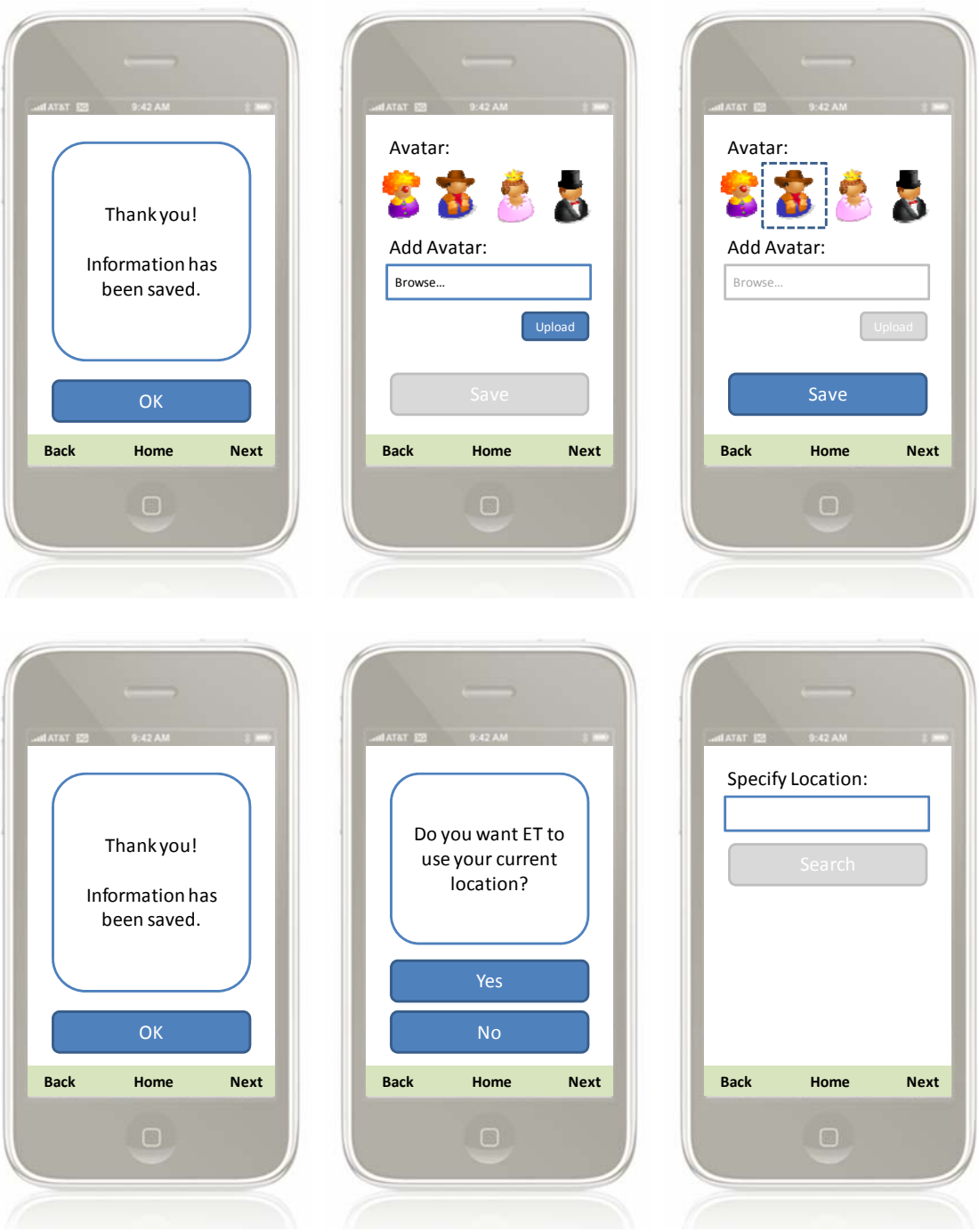
Information Seeking Preference Questions

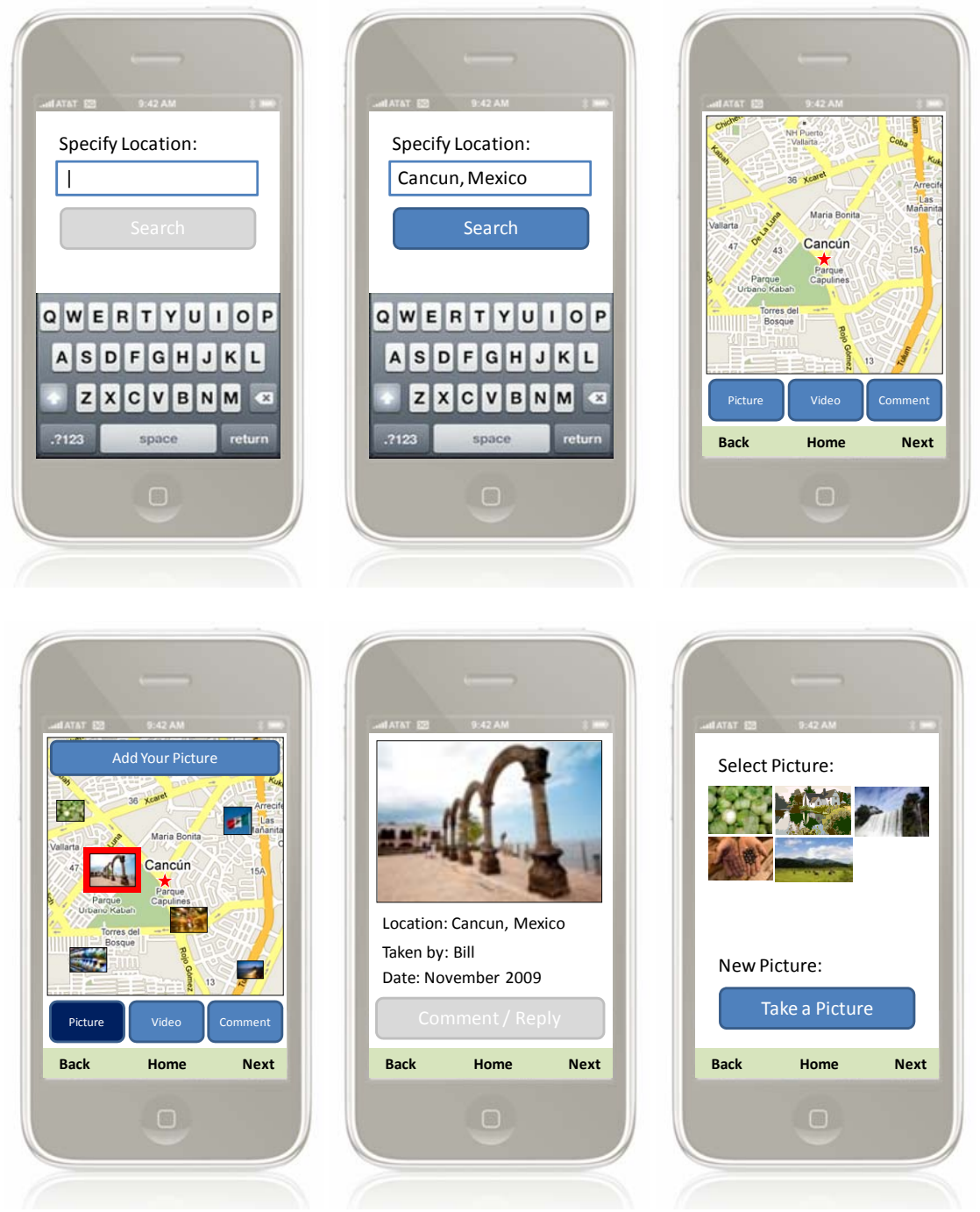
F. Additional Screen Images of Product Interfaces

Please refer to http://sunwebspace.com/backup/etravel_prototype_final.ppt for the functional interactive and dynamic prototype.

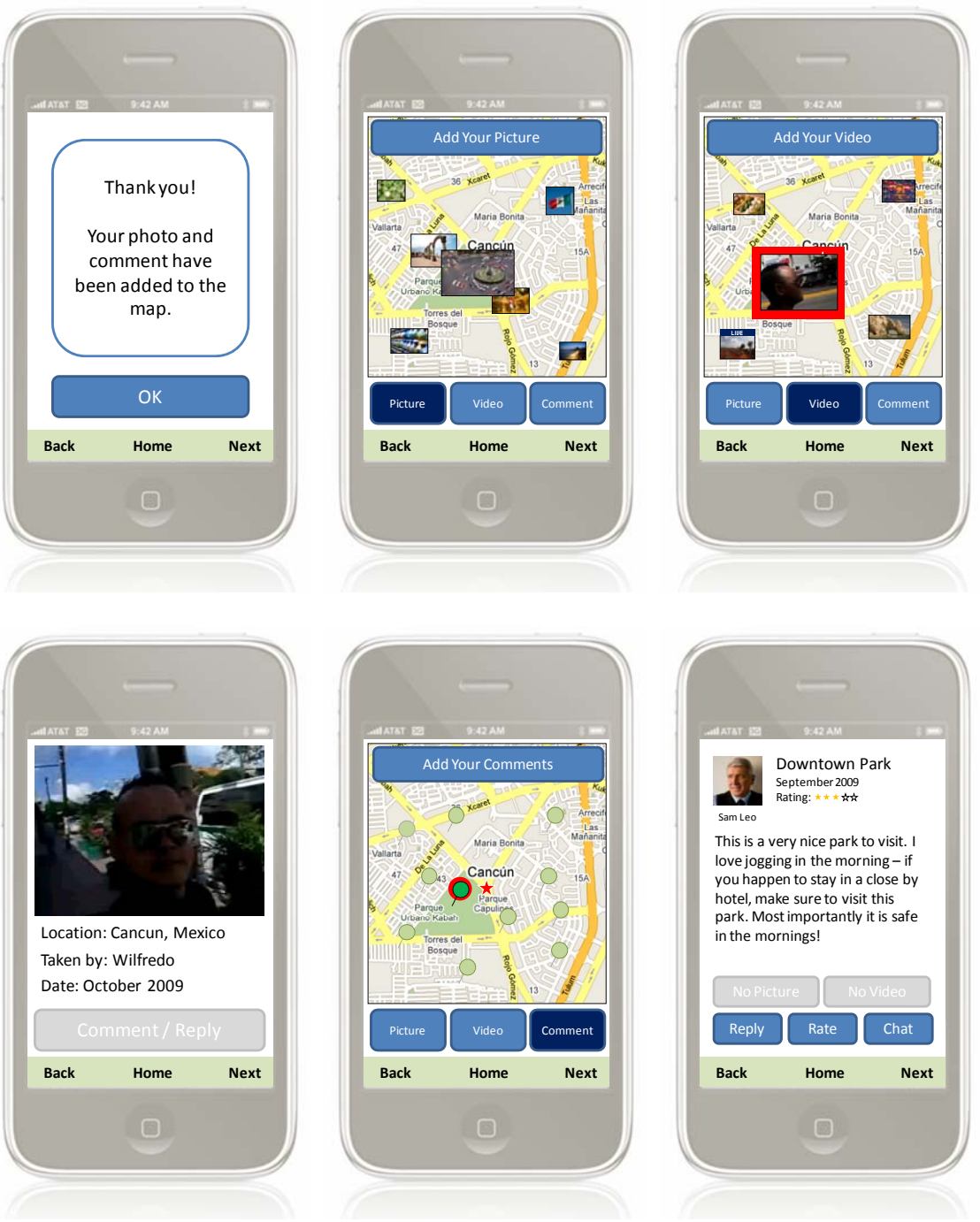



Name:
Save
Back
Home
Next
Name:
Save
Name:
John007
Save
Thank you!
Information has been saved.
OK
Personality:
Sensitive
Confident
Energetic
Shy
Curios
Conservative
Compassionate
Competitive
Organized
Easy-Going
Save

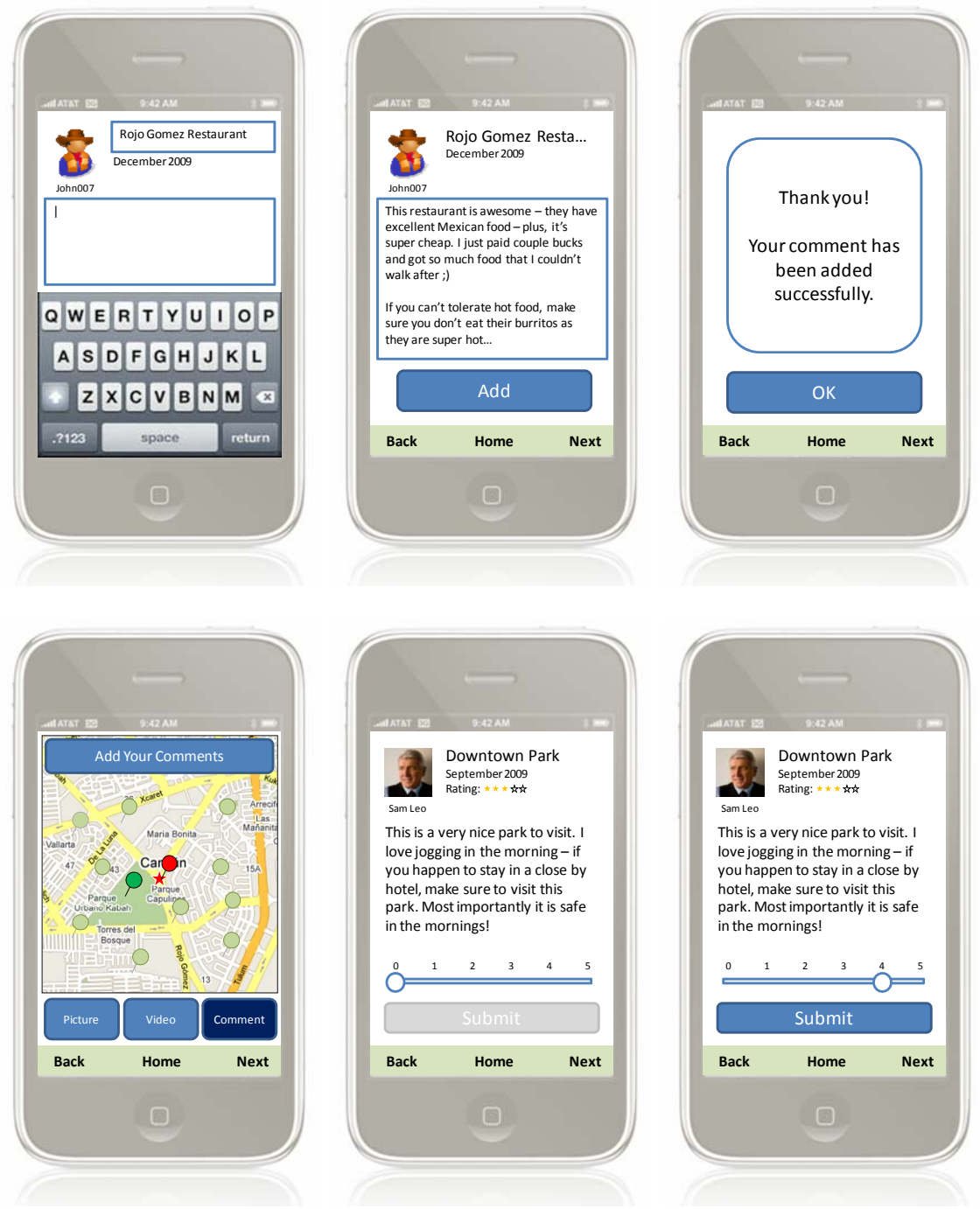

Thank you!
Information has been saved.
OK
Back
Home
Next
Avatar:
Add Avatar:
Browse...
Upload
Save
Back
Home
Next
Avatar:
Add Avatar:
Browse...
Upload
Save
Back
Home
Next
Thank you!
Information has been saved.
OK
Back
Home
Next
Do you want ET to use your current location?
Yes
No
Back
Home
Next
Specify Location:
Search
Back
Home
Next

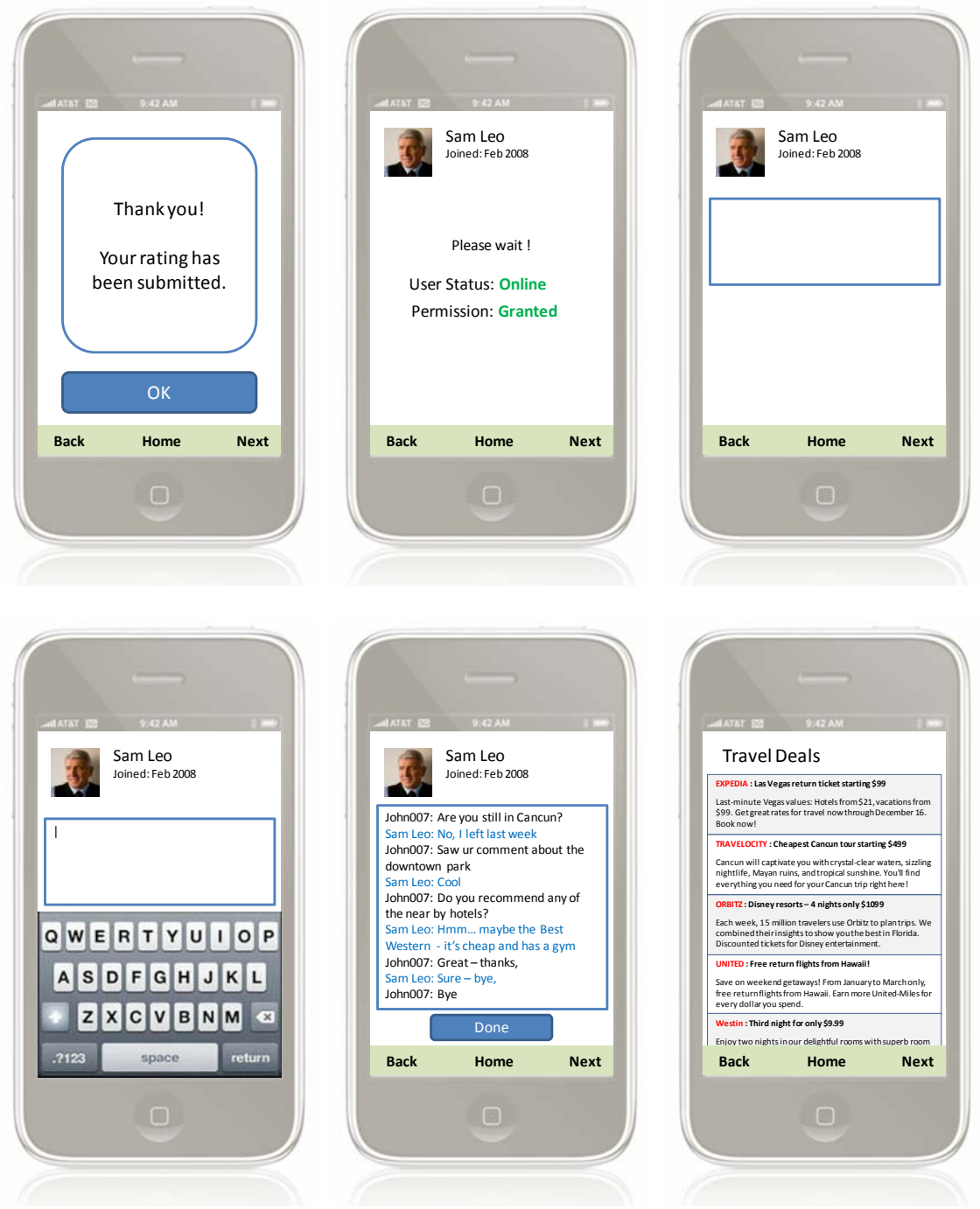

Specify Location:
Search
Specify Location:
Cancun, Mexico
Search
Cancún
Picture
Video
Comment
Back
Home
Next
Add Your Picture
Location: Cancun, Mexico
Taken by: Bill
Date: November 2009
Comment / Reply
Select Picture:
New Picture:
Take a Picture


AT&T
9:42 AM
Dec 2009
14:56:08
Name of Place:
Your Comments:
Save
Back
Home
Next
Cancun Downtown
This is the main square of the downtown which has an awful traffic but it is fun to drive around.
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
.?123
space
return


Thank you!
Your photo and comment have been added to the map.
OK
Back Home Next
Add Your Picture
Picture Video Comment
Back Home Next
Add Your Video
Picture Video Comment
Back Home Next
Location: Cancun, Mexico
Taken by: Wilfredo
Date: October 2009
Comment / Reply
Back Home Next
Add Your Comments
Picture Video Comment
Back Home Next
Downtown Park
September 2009
Rating: ★★★☆☆
Sam Leo
This is a very nice park to visit. I love jogging in the morning – if you happen to stay in a close by hotel, make sure to visit this park. Most importantly it is safe in the mornings!
No Picture No Video
Reply Rate Chat
Back Home Next

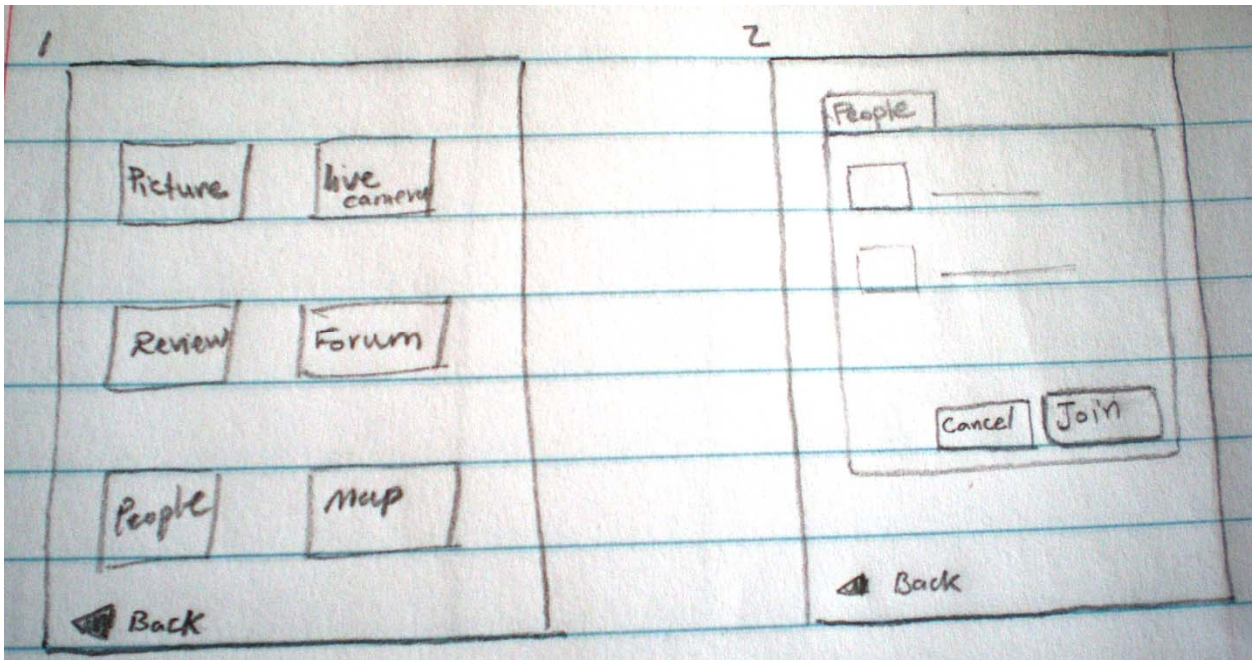

RE: Downtown Park
December 2009
John007
Back
Home
Next
RE: Downtown Park
December 2009
John007
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
.?123
space
return
RE: Downtown Park
December 2009
John007
Thanks for the useful comment – do you recommend any of the close by hotels?
Send
Back
Home
Next
Thank you!
Your comment has been sent successfully.
OK
Back
Home
Next
December 2009
John007
Back
Home
Next
December 2009
John007
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
.?123
space
return

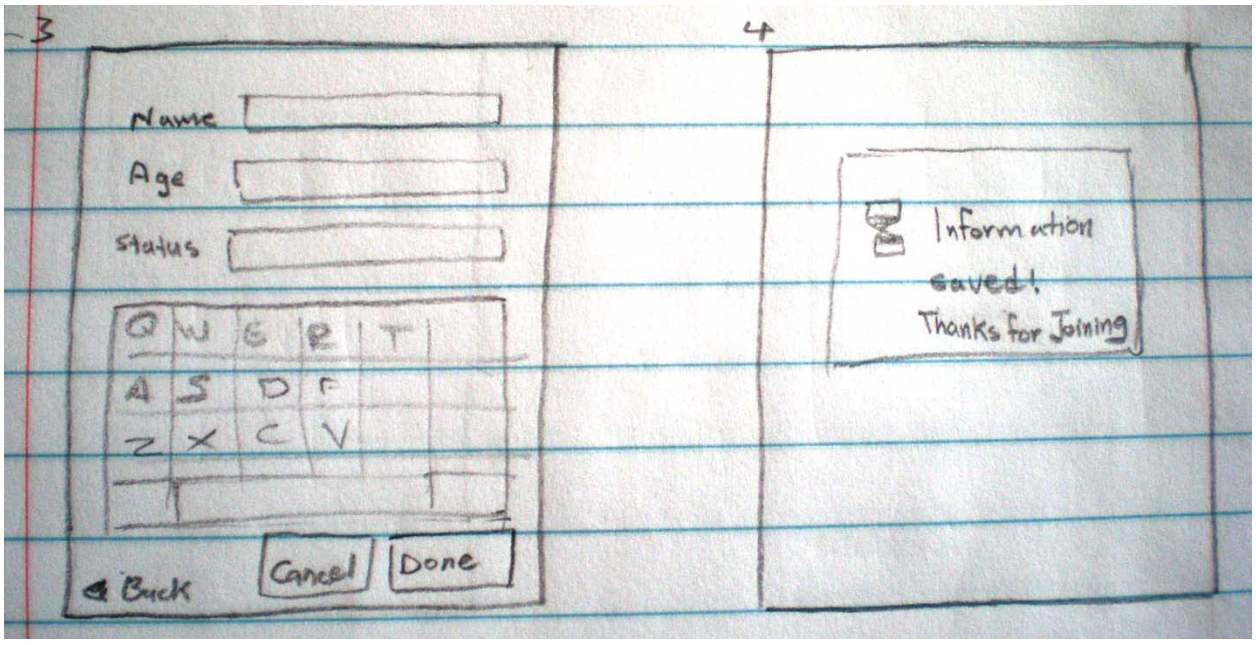

Rojo Gomez Restaurant
December 2009
John007
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
.?123
space
return
Rojo Gomez Resta...
December 2009
John007
This restaurant is awesome – they have excellent Mexican food – plus, it's super cheap. I just paid couple bucks and got so much food that I couldn't walk after ;)
If you can't tolerate hot food, make sure you don't eat their burritos as they are super hot...
Add
Back
Home
Next
Thank you!
Your comment has been added successfully.
OK
Back
Home
Next
Add Your Comments
Picture
Video
Comment
Back
Home
Next
Downtown Park
September 2009
Rating:
Sam Leo
This is a very nice park to visit. I love jogging in the morning – if you happen to stay in a close by hotel, make sure to visit this park. Most importantly it is safe in the mornings!
0 1 2 3 4 5
Submit
Back
Home
Next
Downtown Park
September 2009
Rating:
Sam Leo
This is a very nice park to visit. I love jogging in the morning – if you happen to stay in a close by hotel, make sure to visit this park. Most importantly it is safe in the mornings!
0 1 2 3 4 5
Submit
Back
Home
Next

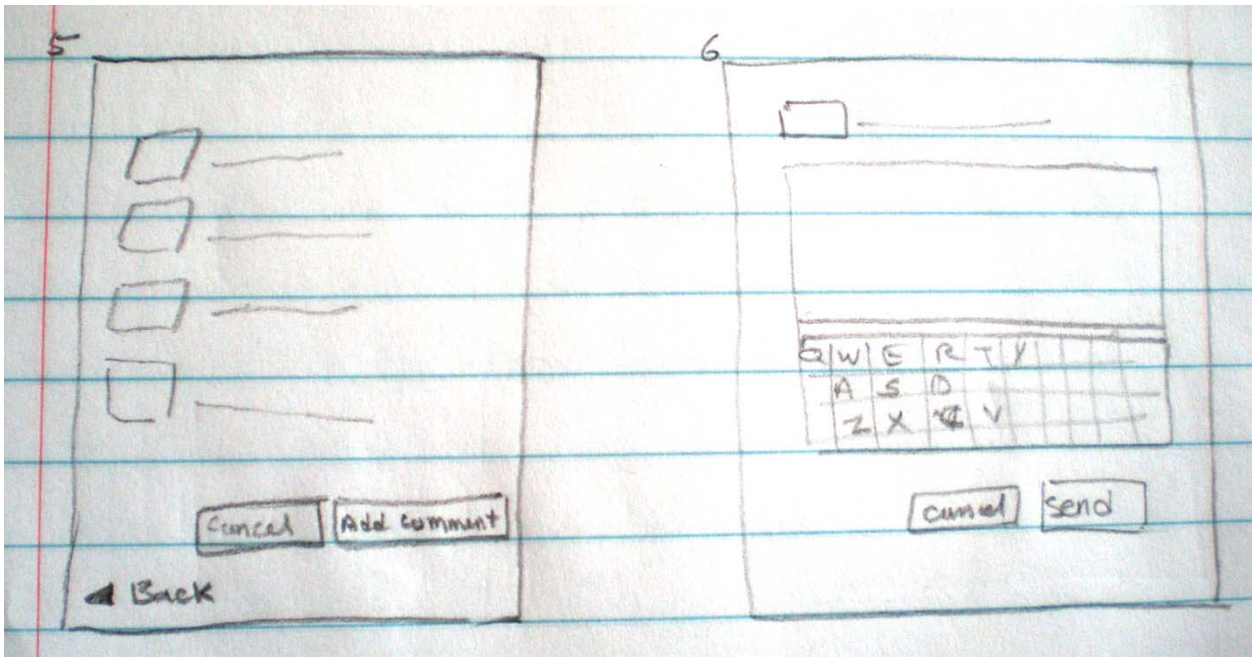

Thank you!
Your rating has been submitted.
OK
Back Home Next
Sam Leo
Joined: Feb 2008
Please wait !
User Status: Online
Permission: Granted
Back Home Next
Sam Leo
Joined: Feb 2008
Back Home Next
Sam Leo
Joined: Feb 2008
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
.?123 space return
Sam Leo
Joined: Feb 2008
John007: Are you still in Cancun?
Sam Leo: No, I left last week
John007: Saw ur comment about the downtown park
Sam Leo: Cool
John007: Do you recommend any of the near by hotels?
Sam Leo: Hmm... maybe the Best Western - it's cheap and has a gym
John007: Great – thanks,
Sam Leo: Sure – bye,
John007: Bye
Done
Back Home Next
Travel Deals
EXPEDIA : Las Vegas return ticket starting $99
Last-minute Vegas values: Hotels from $21, vacations from $99. Get great rates for travel now through December 16. Book now!
TRAVELOCITY : Cheapest Cancun tour starting $499
Cancun will captivate you with crystal-clear waters, sizzling nightlife, Mayan ruins, and tropical sunshine. You'll find everything you need for your Cancun trip right here!
ORBITZ : Disney resorts – 4 nights only $1099
Each week, 15 million travelers use Orbitz to plan trips. We combined their insights to show you the best in Florida. Discounted tickets for Disney entertainment.
UNITED : Free return flights from Hawaii!
Save on weekend getaways! From January to March only, free return flights from Hawaii. Earn more United-Miles for every dollar you spend.
Westin : Third night for only $9.99
Enjoy two nights in our delightful rooms with superb room
Back Home Next

G. Others

Initial Draft Paper Prototypes (Brainstorming Sketches)






5
Cancel
Add comment
Back
6
Q W E R T Y
A S D
Z X V
cancel
send

Online Questionnaire Screenshots

1. Demographic Information — Download

		Response Percent	Response Count
Show replies	Name (Optional):	83.3%	10
Show replies	Email (Optional):	58.3%	7
Show replies	Sex (M/F):	100.0%	12
Show replies	Age:	100.0%	12
	answered question		12
	skipped question		1

2. How often do you use your personal/work computer (including your laptop) to: — Create Chart — Download

	hourly	daily	weekly	monthly	never	Response Count
browse Internet (e.g. Internet Explorer or Firefox)	61.5% (8)	38.5% (5)	0.0% (0)	0.0% (0)	0.0% (0)	13
check emails (e.g. Outlook Express)	53.8% (7)	38.5% (5)	0.0% (0)	7.7% (1)	0.0% (0)	13
navigate a digital map (e.g. Google Maps)	0.0% (0)	41.7% (5)	41.7% (5)	16.7% (2)	0.0% (0)	12
utilize a social networking site (e.g. Facebook, Twitter)	15.4% (2)	38.5% (5)	7.7% (1)	15.4% (2)	23.1% (3)	13
chat with other users (e.g. Skype, Yahoo Chat)	7.7% (1)	15.4% (2)	23.1% (3)	23.1% (3)	30.8% (4)	13
search for travel deals (e.g. Expedia, Travelocity)	0.0% (0)	0.0% (0)	8.3% (1)	83.3% (10)	8.3% (1)	12
					answered question	13
					skipped question	0

3. How often do you use your personal/work cellphone (including your PDA)to: Create Chart Download

	hourly	daily	weekly	monthly	never	Response Count
browse Internet	30.8% (4)	15.4% (2)	0.0% (0)	15.4% (2)	38.5% (5)	13
check emails	25.0% (3)	25.0% (3)	0.0% (0)	8.3% (1)	41.7% (5)	12
navigate a digital map	0.0% (0)	25.0% (3)	8.3% (1)	16.7% (2)	50.0% (6)	12
utilize a social networking site	16.7% (2)	0.0% (0)	8.3% (1)	0.0% (0)	75.0% (9)	12
chat with other users	16.7% (2)	8.3% (1)	8.3% (1)	8.3% (1)	58.3% (7)	12
text message others	25.0% (3)	33.3% (4)	8.3% (1)	0.0% (0)	33.3% (4)	12
search for travel deals	0.0% (0)	0.0% (0)	0.0% (0)	25.0% (3)	75.0% (9)	12
					answered question	13
					skipped question	0

Page: eTravel Specific Feedback

1. Usability Evaluation Create Chart Download

	Strongly Agree	Agree	Somehow Agree	Neutral	Somehow Disagree	Disagree	Strongly Disagree	Rating Average	Response Count
eTravel can be an effective tool to share information about a new location with others	23.1% (3)	76.9% (10)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.77	13
eTravel can be a time efficient solution in sharing information about a new location with others	30.8% (4)	46.2% (6)	15.4% (2)	7.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	2.00	13
eTravel menu items and commands are easy to remember	30.8% (4)	69.2% (9)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.69	13
eTravel can be learned quickly	38.5% (5)	61.5% (8)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.62	13
Overall I am satisfied with the design of eTravel	46.2% (6)	53.8% (7)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.54	13
							answered question		13
							skipped question		0

4. Personal Preference / Evaluation — Create Chart | Download

	Strongly Agree	Agree	Somehow Agree	Neutral	Somehow Disagree	Disagree	Strongly Disagree	Rating Average	Response Count
I consider myself experienced with technology	38.5% (5)	38.5% (5)	7.7% (1)	15.4% (2)	0.0% (0)	0.0% (0)	0.0% (0)	2.00	13
I can usually find what I am looking for on Internet	38.5% (5)	46.2% (6)	15.4% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.77	13
I like social networking (e.g. Facebook, Twitter)	30.8% (4)	7.7% (1)	15.4% (2)	30.8% (4)	7.7% (1)	7.7% (1)	0.0% (0)	3.00	13
I share web content (e.g. pictures, videos, comments) with others frequently	30.8% (4)	7.7% (1)	15.4% (2)	23.1% (3)	0.0% (0)	7.7% (1)	15.4% (2)	3.38	13
I would feel comfortable to chat online with people that I don't know	7.7% (1)	30.8% (4)	15.4% (2)	15.4% (2)	15.4% (2)	0.0% (0)	15.4% (2)	3.62	13
I don't mind to put my information online	0.0% (0)	23.1% (3)	7.7% (1)	23.1% (3)	15.4% (2)	23.1% (3)	7.7% (1)	4.31	13
I think web content can be customized based on user's personality traits	23.1% (3)	30.8% (4)	15.4% (2)	30.8% (4)	0.0% (0)	0.0% (0)	0.0% (0)	2.54	13
Others emotions and opinions such as comments and ratings are important to me	30.8% (4)	30.8% (4)	38.5% (5)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.08	13
I like to search online about new places before I travel	61.5% (8)	30.8% (4)	7.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.46	13
I like visual information rather than textual information	46.2% (6)	30.8% (4)	15.4% (2)	7.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	1.85	13
								answered question	13
								skipped question	0

Instruction Sheet (Task and Answers)

eTravel Instruction Sheet

eTravel is a early prototype of an iPhone application. eTravel enables you to explore different locations around the world and share your picture, videos and comments with others. eTravel uses personality dimensions to customize the shared content with others that share similar personality dimensions. Therefore, eTravel can help you discover the things that are of your interest before you travel.

eTravel's home page provide three main functions through which you can set up your personality profile, browse new locations and share information with others and finally find out about new travel deals.

eTravels *schematic* prototype can be downloaded directly from:
http://www.sunwebspace.com/backup/etravel_final.pptx (PowerPoint 2007)
http://www.sunwebspace.com/backup/etravel_final.ppt (Power Point 2003)
http://www.sunwebspace.com/backup/etravel_final.pdf (Adobe Acrobat)

The dynamic PowerPoint/Acrobat file is just an early prototype. It is a snapshot of how eTravel application will look like if developed. The information on the slides are already been entered and you ONLY click on the appropriate menu or item to advance through the slides and accomplish a given task (mentioned below). Please do not be surprised if you cannot enter your information in the slides and/or if you cannot select an option/button.

A. Please download the slides, open them and accomplish each of the following tasks by clicking on the buttons/menu items provided in the slides.
B. Please fill the 'eTravel Record Sheet' to provide your feedback in regards to each task as soon as you finish each of the tasks.
C. Please follow this link, *after you have finished all of the tasks*, to complete a short questionnaire: http://www.surveymonkey.com/s/WPTY77J

Task1: Setting the profile
In this task you are required to enter your name, set your personality dimensions and choose a picture as your avatar.

1) Enter your name (i.e. John007) and save the information
2) Set the dimensions of your personality and save them
3) Choose your avatar (i.e. Cowboy) and save the information

Task 2: Searching the Map and Sharing Content
In this task you will use the map in order to search for a new destination and then share different contents with others. This task has couple subtasks:

e) **Search for a new place:** Please enter the name of the desired place (i.e. Cancun, Mexico). This is required so that the user will be able to see the pictures, watch the videos and see the comments about that location.

f) **Browse a picture:** Navigate to the picture section of the map and click on the intended picture (i.e. glowing picture).

g) **Add a picture:** After returning to the map, add your own picture by pressing on the 'Add Your Picture' button on top of the map. Take a picture with the built-in iPhone camera, write the name of the place, and add your comments to the picture. You will see your picture added to the map.

h) **Watching a video:** Click on the 'Video' button to browse videos posted by others with similar personality dimensions. Open the videos of downtown Cancun, Mexico (i.e. glowing video).

i) **See a comment:** After returning back to the map and clicking on the 'Comment' button, click on the green pin (i.e. glowing pin) on the map to see a comment made by another user. You need also to:
   1) Reply to the comment by clicking on the 'Reply' button
   2) Rate the comment by clicking on the 'Rate' button
   3) Chat with the comment's author by clicking on the 'Chat' button

Task 3: Browsing Travel Deals

In the last task, you simply browse the available travel deals.

eTravel Record Sheet

Task 1: Setting the Profile

Please enter your response in this area…..

Task 2: Searching the Map and Sharing Content

Please enter your response in this area…..

Task 3: Browsing Travel Deals

Please enter your response in this area…..

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