

Locative Media App: mycapsule

A Study in Locative Media, Interface Design, and App Development



Department of Art & Design, Department of Computer Science; University of Wisconsin- Eau Claire
Students: Derek Hestekin, BFA Graphic Design; Stephen Thorsell, Computer Science
Faculty Mentors: Sooyun Im, Mike McMann



Abstract

The purpose of this research was to explore how individuals experience locative media through technology in regard to physical space, virtual space, and location-aware surveillance. Due to the increased sophistication of mobile technology and increased popularity of locative media, it was the group's goal to create an interesting mobile app that was technologically functional with a user-friendly interface design. Through informal interviews with mobile app users and researching existing technologies and interface designs used in locative media apps, the group decided to create a location-aware app that served as a virtual time capsule, entitled myCAPSULE. In using myCAPSULE, users will be able to technologically record an experience through geographically tagging photos, videos, or memos to a physical location through locative media. Once myCAPSULE is created, the group is eager to discover how users record or retrieve experiences in virtual space while continuing to interact within physical locations.

What is Locative Media?

A relatively new phenomenon, location-based media, "locative media" is described as "information bound to a specific location". Locative media allows users to become more aware of their environmental surroundings and correlate various types of media/information to a geographical location. (Shirvane, 2006) These locations can vary from vast landscapes, urban neighborhoods, or large metropolitan areas. The environment in which a user publishes information gives their information a specific cultural context, which influences who sees the information, and how they will respond. This notion is why locative media is increasingly used in current mobile apps. Examples of locative media apps include Facebook, Foursquare, Grindr, and Loopt.



Research

Design Research

Derek's task throughout developing the app was to research current mobile interface designs and concepts. Starting by researching academic articles, Derek developed a basic understanding of locative media and current mobile applications. Through his use and research of foursquare, the group decided to create a social media app. Derek researched existing mobile interface design, and evaluated the designs based on creativity, visual appeal, color scheme, and consumer usability. In addition, Derek researched photos and textures, which greatly inspired the color palette for myCAPSULE.



Technological Research:

Stephen discovered, through reasearch, that the hardest technical aspect to locative media is displaying the location of a person, place, or information on a mobile map or grid. After researching multiple options, he chose to utilize Apple's MapKit framework system. Coupled with previous knowledge, MapKit and X-Code were used because of their universal interface, which would work on all versions of the iPhone. In addition, Stephen researched basic formats for navigation controllers, as shown below.



Application Development

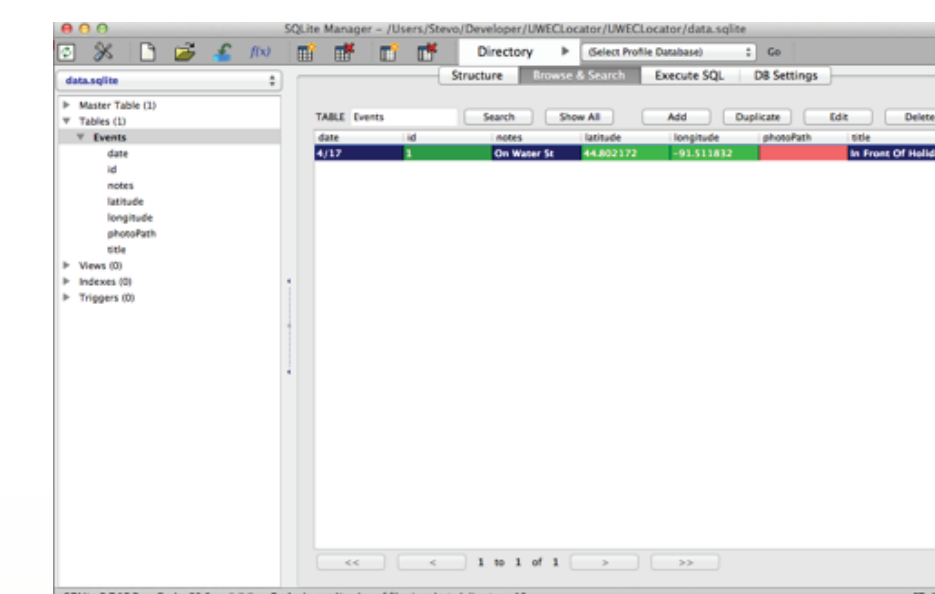
Design Process

Deciding on a time capsule concept, Derek gathered a series of images in a "mood board", and developed a series of application icons, as shown below. The concept of a time capsule cover inspired the app icon. Without previously knowing the context, the visual icon may inform a viewer of the app's uses and functions. For myCAPSULE's color palette, the group chose colors intended to create a sense of nostalgia. This included hues of golden yellow with accents of olive green and rust orange. Texture was an important issue in creating the nostalgic feel. In addition to the color scheme and icon, Derek created several sketches illustrating the information flow of the application. Derek's ideas are evident in the continuous tab bar and simple design layout of the final product. These features make the navigation and use of the app easier for users. Throughout the design of the application, Derek worked with Stephen in Apple X-Code, which makes the project a true collaboration.



Technological Process

After research, Stephen chose to use Apple's MapKit because it could be used with both Google and Apple maps, which makes the app more streamlined and versatile. The simplicity and usability of the app was a result of Stephen's stationary tab bar. With this tool, users are always able to view their location, view previous capsules, and add new capsules at their current location. Importing Derek's designs, Stephen coded the entire app in X-Code. One of the most complicated aspects in the development of myCAPSULE was creating a database to store the information. Stephen chose to use an SQLite database, because it is lightweight and efficient. However, one of the disappointing aspects of SQLite is it only allows for local storage of information. This does not affect the proto-type in any way, however, it must be addressed in the future development of myCAPSULE.



Future Intentions

In the future, the group would like to make the app functional and interactive. In order to make a social network, the app would require a server to store all of the information. In addition, the app would require a system for creating user profiles. A great way of doing this would be providing Facebook integration. In addition, the group would like to produce a filter for the information, such as one's major or information category. This would make viewing videos much easier and personalized for a user.