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CSC 436
Milestone 2
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Project Description:

The app would allow the user to take photos at a location and “leave” the photo there. The photo would appear on a map which other users can see; the photo would be viewable by the other users when they were within some predetermined distance of the location where the photo was taken.

Photos could either persist for only a limited time, or permanently, depending on the choice of the user. Furthermore, a photo could be optionally password-protected so only other users with the key could view the photo.

Working name for the app is “Relic”.

Screens:

- Map Screen:
 - The initial screen upon startup will be a map of the surrounding area. The screen will be tabbed; other screens can be reachable from the tabs.
 - The map screen will have markers on it corresponding to data from other users which was placed at those locations, known as “Relics”. Tapping on one such marker will cause a screen transition to the detail screen for that Relic. (See Detail Screen)
 - At the bottom of the map screen is an “add” button which, when tapped, causes a transition to the New Relic Screen.
- New Relic Screen:
 - This screen allows the user to take a photo or video, add a description, and upload it. Information such as the timestamp and the geotag of the relic are added automatically. Leaving the New Relic screen causes an unwind back to the previous screen.
- My Relics Screen:
 - This screen can be reached by the tab bar on the Map Screen or the Chat Screen. It holds a list of all the Relics created by the current user, and will strongly resemble the work done in lab. It will utilize a Table View, which will display a list of Relics. Clicking on a cell in the table causes a transition to the detail screen for that Relic. (See Detail Screen)
- Detail Screen:
 - This screen can be reached either by clicking on the corresponding marker on the Map Screen, or by clicking on the corresponding table cell on the My Relics Screen. It displays all the information about the relic, such as the username of its creator, the timestamp of its creation, and its location. It also displays the media file associated with that relic. If the relic belongs to another user, tapping on the username causes a transition to the Message Screen associated with that user. (See Message Screen) Leaving the Detail Screen causes an unwind back to the previous screen.
- Chats Screen:
 - This screen can be reached by the tab bar on the Map Screen or the My Relics Screen. It holds a list of currently open message logs with other users. Clicking on one such message log takes you to the message screen for that user. (See Message Screen)
- Message Screen:
 - This screen displays a chat log between the current user and another user. Leaving this screen causes an unwind back to the previous screen.

Primary Data:

- Map data. Acquired through a map API. Used to display the local map.
- Geolocation data. Acquired through a map API. Used to geotag Relic objects.
- Timestamp data. Acquired from the user's device.
- User media. Acquired from the user's camera. Used as the primary media for the Relic object.
- Description data. Acquired from user input. Used by the Relic object.

Model Classes:

- Relic Class:
 - Contains a RelicMedia object, a geotag, a timestamp, a description, and a reference to the User object which created the relic.
- User Class:
 - Contains a username, a profile image, a profile description, a "last known position" geotag, and a collection of Relic objects which that user created.

iOS APIs:

- MediaPlayer
- AVFoundation
- MapKit

External APIs:

None so far.