Project Proposal: CSULB Friend Finder

Friends of the team members have expressed interest in a **smartphone app to track the locations of friends and set meeting locations on the CSULB campus**. Commercial apps already exist for tracking friends on the city level; notably, the “Find My Friends!” Android app.

**Our goal is to adapt the concept to the CSULB campus**, with customizations like class schedule uploading (“e.g., In CECS 100 from 9:30 AM - 10:45 PM”), automatic building identification (“e.g., at Hall of Science”), and a built-in compass for navigation to a CSULB location. The main goal is to reduce communication problems along the lines of “‘Hey, I'm at the HSCI building!’ - ‘Where’s that?’”

To locate a friend, the user can access an entire map of CSULB. In this map, he/she can view friends as pins on their exact location, or a small profile picture of them. This map can be refreshed automatically, while the phone is in standby, or manually if the user wishes to save battery life. Upon clicking a friend's pin, the app brings up the friend's status, if the friend manually gave one; e.g., “I'm in ECS, but I'm getting out early at 4:45!”. Otherwise, the app displays the friend's auto-location. If the friend had previously uploaded his/her class schedule, and his/her location is reasonably in the vicinity of the class he/she should be in, then the status will identify the friend's location by the building name.

The user can choose to navigate to that friend, upon which the app will estimate the time to walk and, if desired, display a compass pointing in the direction of the friend. This feature will be especially useful for new students to the campus.

(Alternatively, the user can search for friends by name or username, as opposed to visually searching for a pin. If the searched-for friend is on the map, then the map will pan to his/her location. If not, the friend's profile is loaded in order to display their last known location.)

The user can update his/her own status automatically or manually. In manual mode, he/she can add a one-line status, and also choose to send notifications (“pokes”) to selected friends via a checklist. A “privacy mode” is available at all times via a convenient slider.

In addition to retrieving friends' locations and uploading one's one location, one can also set meeting locations along with meeting times, by either dropping a pin on the CSULB map or by specifying the building name, which the app will then look up and pinpoint on the map. These meeting locations can have a option to confirm. Finally, the meeting location can estimate friends’ arrival times if they are determined to be walking in the correct direction in the few minutes before the pre-set meeting time.

In the process of **delivering a Friend Finder app reliable enough for CSULB students** to use, the team members have the objective of learning about the **software development process**, about **iOS development**, and the **MVC model** that the app will be based on.

Timeline (tentative and condensed, from a comprehensive original)

Development is divided between a front-end (iPhone) team and a back-end (Amazon Web Services) team. Kane leads the **front-end development team** consisting of **Kane**, **David**, and **Nick**. Tan leads the **back-end team** consisting of **Tan**, **Armando**, and **Miguel**. **Gustavo**, as **Project Owner**, works with both teams and approves cross-team decisions.

In the following timeline, please note that sprints are scheduled to be completed by Tuesday 6 PM, as this is the team's agreed-upon meeting time. Each meeting serves as a review of the sprint just completed, and as a planning meeting for the upcoming sprint.

| Sprint # | Completed by: | Released by: | Goals (Frontend/Backend) |
| --- | --- | --- | --- |
| **1** | Tues. Sept. 16 |  | iPhone wireframes/AWS instance set up |
| **2** | Tues. Sept. 23 | Thurs. Sept. 25 | Search friends menu/Friends table in DB |
| **3** | Tues. Sept. 30 |  | Add friend menu/DB support |
| **4** | Tues. Oct. 7 |  | “Update status” menu/DB support |
| **5** | Tues. Oct. 14 |  | “Set up meeting” menu/DB support |
| **6** | Tues. Oct. 21 | Thurs. Oct 23. | Navigation+compass/DB support for locations |
| **7** | Tues. Oct. 28 |  | Add map to “Search friends” menu/DB support |
| **8** | Tues. Nov. 4 |  | Revise UI/DB support for building identification |
| **9** | Tues. Nov. 11 |  | Settings menu (both) |
| **10** | Tues. Nov. 18 | Thurs. Nov. 20 | Begin testing, release near-deliverable app |
| **11** | Tues. Nov. 25 |  | Finish testing and bug-fixing |
| **12** | Tues. Dec. 2 |  | Documentation |
| **13** |  | Thurs. Dec. 11 | Prepare app, documentation, and presentation |

— Team #2:

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Tan Tran Gustavo Yepes Armando Zavala