## Journal: Android Application Family Protector

### **CSC 780: Application Development for Mobile Devices**

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# WEEK 1: September 24<sup>th</sup>, 2015

- 1. Uls for Parent mode of the phone
  - a. When the user downloads the application for the first time the application starts in the setup mode.
  - b. The user can select the mode to be either 'Parent Mode' or 'Child Mode'
  - c. On selecting the 'Parent Mode' the next screen gives option of adding child.
  - d. On selecting 'Add A child' the next screen gives option to add details of the child and save
- 2. Activities created
  - a. Welcome Screen
  - b. Choose Mode
  - c. Parent Mode Home Screen
  - d. Child Details Screen
- 3. Methods
  - a. Setup OnClickListeners for button to navigate through screens

#### Next Week:

- 1. Try to set up the server for the login credentials through parse.com cloud service
- 2. Try to save the state of the application i.e. either parent mode or child mode

### WEEK 2: October 1<sup>st</sup>, 2015

- 1. Set up the server at parse.com
- 2. Wrote a small application to save the username and password to parse.com

#### Next Week:

 Integrate the code into application to save the parent login credentials and the child details

## **WEEK 3: October 8<sup>th</sup>, 2015**

- 1. Setup login for Parent Mode
  - a. The user has the option to Register. In case they have already signed up, they can use the login link.
  - b. The login credentials are stored on the parse server in the "UserCredentials" data table.
  - c. When the user chooses the login link, the credentials entered are compared with the credentials stored on Parse.com
- 2. Storing the child details
  - a. After logging in and selecting the 'Parent Mode' the parent can add the child details
  - b. The child details (name, gender and birthdate), along with username are stored on parse in "ChildDetails" data table
- 3. Fetching child details on login
  - a. Once the user logs-in details about all the children specific to the user-id are fetched and displayed on parent home screen.
- 4. Updated child mode UI
  - a. The parent can login to the app from his/her child phone and select the child mode
  - b. On selecting the child mode, details of all the children specific to the user-id are fetched and displayed. The parent then can choose the child to whom the device belongs

#### Problems:

- 1. The Login screen currently gives an invalid credentials error on the first attempt, even if the credentials are correct. On the clicking the Login button again the user is allowed access
- 2. Created a new app on Parse to save the data. However, the new app does not save the data. Currently using the old app to save data on parse.

#### Next Week:

- 1. Resolve the login error
- 2. Try to figure out the problem with parse
- 3. Save the state of the application so the user does not have to login each time
- 4. Set up alerts instead of textView for the invalid credentials login

# **WEEK 4: October 15<sup>th</sup>, 2015**

- 1. Save the state of the application
  - a. If the user enters his credentials through registration screen the username and password are saved to the shared preferences and the application logged in state is also set to true
  - b. If the user signs-in to the application the user name and password are saved to the shared preferences and the application logged in state is also set to true
  - c. If the user starts the application again, the application directly goes to the status of the parent home screen.
- 2. Launching the navigation drawer
  - a. The logout option and other options such as (settings etc.) are provided in the navigation drawer

#### Next Week:

1. Set up the child mode with the map view and saving the location rule.

## **WEEK 5: October 22<sup>nd</sup>, 2015**

- 1. Save the mode for the phone
  - a. If the user logins in and chooses either parent mode or child mode, the mode is saved in sharedPreference. On restarting the app, the app starts in the same mode.
- 2. Maps Activity
  - a. In the child mode on selecting the "Location Perimeter" option on the "Rules Settings", google maps activity is started
  - b. The map defaults the current location of the phone

#### Problems:

1. The Map fragmentAcitivity does not display the Action bar even when the application theme is Theme. Apprompact. All other activities show the Action bar.

#### Next Week:

- 1. Implement the search bar for the map activity.
- 2. Read the text from the search bar

# **WEEK 6: October 29<sup>th</sup>, 2015**

- 1. Implemented the search bar in the maps activity
  - a. Updated the maps activity to have a search in the action bar and read from the search field
- 2. Updated the app screens to better UI
  - a. Added a splash screen
  - b. Add the floating action button to add child details screen
  - c. Added the toolbar to all the screens

#### Problems:

1. The search icon is not visible on the action bar but in the overflow menu

#### Next Week:

- 1. Implement the search query parsing to display the location
- 2. Store the location in terms of latitude and longitude in parse cloud

# WEEK 7: November 5<sup>th</sup>, 2015

- 1. Implemented the search query parsing
  - a. On searching in the search bar the location is displayed
- 2. Storing the location on parse
  - a. The location searched by the person is stored on the parse

#### Next Week:

- 1. Implement the check logic to check for the child's location with the rule location specified
- 2. Try to implement the auto search in the maps activity

## **WEEK 8: November 12<sup>th</sup>, 2015**

- 1. Accessing the location stored on parse to create a geofence
- 2. Currently the geofence is created through an activity and a notification is sent, however the geofence will be created as a part of a service after receiving a broadcast message from the phone

#### Next Week:

- Implement the geofence functionality to check for exit condition through service
- 2. Implement the rule saving functionality through the parent mode

## WEEK 8: November 19<sup>th</sup>, 2015

- 1. Add on long press event to the map. The user can pick a new location by long pressing on the map
- 2. The user can provide the radius for the location. Based on the radius a circle is drawn on the map for that the radius.

#### Next Week:

- 1. Implement the functionality where user can change the radius of the circle on touch
- 2. Send a notification to the parent phone when the child exits the geofence