### **UserClass**

- RESPONSIBILITIES:
- Gets and sets the User ID (UID) of the current user and the user's information (name, email etc)
- Keeps track of the user's followers, followings and follow requests
- COLLABORATORS
- AcceptDeclineFollowRequestFragment
- FollowFollowing
- NotificationListAdapter
- Register Activity
- Notification Activity
- OtherUserScreen Activity
- Home Activity
- Login Activity
- UserCalendar Activity
- EditUser Activity
- ForumManager Activity

### **Habit Class**

- RESPONSIBILTIES
- Instantiate habit (Habit object) with attributes: UID, HID, title, reason, dateToStart, listPosition, privacy settings (public/ private) and overall progress (progress bar)
- Getters and setters for each property

- COLLABORATORS
- HabitInstance
- HabitListAdapter
- ToDoEventListAdapter
- UserCalendar
- Home
- viewEditHabitFragment
- addHabitFragment
- OtherUserScreen Activity

### **Database**

- RESPONSIBILITIES
- Provides API calls to Firebase database for addData, updateDate, addImage, deleteImage
- COLLABORATORS
- Home
- ForumnPostList
- EditUserActivity
- FollowerFollowing
- Login
- MapsFragment
- OtherUserScreen
- UserCalendar

### **HabitInstanceClass**

- RESPONSIBILTIES:
- class creates a habit instance/event which the following attributes: EID
  (event id), UID (user id), HID (habit id), opt\_comment (optional
  comment), date, duration, IID (image id path to image storage), FID
  (forum id), isShared (shared setting), optLoc (location)
- getters and setters for specified attributes
- Getters and setters for these properties

- COLLABORATORS:
- Habit
- UserCalendar
- EditUserActivity
- UserCalendar Activity
- MapsFragment
- CompletedEventsListAdapter
- addHabitEventFragment
- editHabitEventFragment

LoginActivity	AppCompatActivity
<ul> <li>RESPONSIBILTIES:</li> <li>Authenticates user</li> <li>Facilitates user sign in using email as unique source</li> </ul>	<ul><li>COLLABORATORS :</li><li>Register</li><li>Home</li></ul>
<ul><li>Reset password option</li><li>gets information of signed in user</li></ul>	<ul><li>User</li><li>Database</li></ul>

CompletedEventsListAdapter	ArrayAdapter <habitinstance></habitinstance>
<ul> <li>RESPONSIBILITIES</li> <li>provides a custom layout for items in completed events list on user calendar</li> </ul>	UserCalendar

RegisterActivity	AppCompatActivity
<ul> <li>RESPONSIBILTIES</li> <li>Takes input of email, password, first name, and last name to create user profile</li> <li>Updates firebase with newly created user</li> <li>Checks uniqueness of email</li> </ul>	<ul><li>COLLABORATORS</li><li>Login</li><li>User</li><li>Database</li></ul>

### **HomeActivity**

### AppCompatActivity

- RESPONSIBILTIES:
- Shows list of all habits (Habit object) of current user
- User can add new habit (title, reason, privacy, date started, weekdays habit recurs)
- User can view/edit existing habit
- User can delete habit
- User can reorder habit in list
- Display for each habit: habit title, habit reason, privacy status date started, habit tag
- Displays the following and follower count for current user
- Allows navigation to the following and follower page by clicking respective count
- User can click user profile to navigate to profile page (change picture, sign out, delete account)
- Other users can view public habits of the user as long as they follow them
- Navigation bar at bottom allows user to switch to calendar, forum, and notification activities

- COLLABORATORS:
- User
- Habit
- ForumManager
- DatabaseClass
- EditUserClass
- habitListAdapter

### AddHabitEventFragment

DialogFragment

- RESPONSIBILITIES
- Lets the user add a habit instance object to their habit list in calendar
- Can only add events of habits that are chosen in home
- Habit event contains the attributes: location, date, user ID, Habit ID,
   Habit instance ID, comment, photograph.
- COLLABORATORS
- CalendarActivity
- Habit
- HabitInstance

### AddHabitFragment RESPONSIBILITIES Lets the user add a habit object to their habit list in Home Habit event contains the attributes: location, date, user ID, Habit ID, Habit instance ID, comment, photograph. DialogFragment COLLABORATORS Home Habit Habit Habit

	deletedHabitEventFragment	DialogFragment
•	<ul><li>RESPOSIBILTIES</li><li>This class is a fragment that asks the user if they wish to delete a habit and all of its events.</li></ul>	<ul><li>COLLABORATORS</li><li>UserCalendar</li></ul>

deleteHabitFragment	DialogFragment
<ul> <li>RESPONSIBILTIES</li> <li>Allows the user delete a habit (and its associated events), and that deletion is reflected in the database.</li> </ul>	<ul><li>COLLABORATORS</li><li>Home</li></ul>

editHabitEventFragment	DialogFragment
<ul> <li>RESPONSIBILTIES</li> <li>This class is a fragment allows a user to view all the details of a habit and edit any details they wish to change.</li> <li>Allows user to change date, duration, optional comment, image, location</li> </ul>	<ul><li>COLLABORATORS</li><li>UserCalendar</li></ul>

ShareHabitEventFragment	DialogFragment
<ul> <li>RESPONSIBILTIES</li> <li>Asks the user if they wish to share their habit event</li> </ul>	<ul><li>COLLABORATORS</li><li>UserCalendar</li></ul>

ViewEditHabitFragment	DialogFragment
<ul> <li>RESPONSIBILTIES</li> <li>Allows the user view and edit the details of a habit</li> </ul>	<ul><li>COLLABORATORS</li><li>Habit</li><li>Home</li></ul>

EditUserActivity	AppCompatActivity
<ul> <li>RESPONSIBILTIES</li> <li>Allows the user sign out of the app</li> <li>Allows the user delete their account, and all of its associated data, and that deletion is reflected in the database</li> </ul>	<ul><li>COLLABORATORS</li><li>Database</li><li>User</li></ul>

### **UserCalendar Activity**

### AppCompatActivity

- RESPONSIBILITIES:
- Displays to do list of habits (habit object) planned for that day
- User can share a private habit instance to the forum
- Can only add events of habits that are added in home
- User can click on habit in list to add an habit event (comment, date, duration, photograph, and location)
- Allows the user to choose/ search their location by opening a map within the app, default location is current user location
- Allows the user to add a photograph by opening a camera within the app to take a new picture or using existing from gallery
- Displays tasks (habit events) (habit instance object) that are completed for current day
- User can go back through calendar picker and see previous to do list of habits and completed habit events
- Navigation bar at bottom allows user to switch to calendar, forum, and notification activities

- COLLABORATORS:
- User
- Habit
- HabitInstance
- addHabitEventFragment
- editHabitEventFragment
- toDoEventsListAdapter
- completedEventsListAdapter

### DatePickerCalendar

### DialogFragment

- RESPONSIBILTIES
- This class is a dialog fragment that allows a user to choose a date to begin a habit
- COLLABORATORS
- UserCalendar

### DialogFragment RESPONSIBILTIES This class is a dialog fragment that allows a user to choose a date to go back and check past habit events DialogFragment COLLABORATORS UserCalendar

# Forum RESPONSIBILITIES creates an instance of forum object (first name, last name, eventDate, duration, comment, location, image getters and setters for specified attributes Forum COLLABORATORS ForumPostList

ForumManagerActivity	AppCompatActivity
<ul> <li>RESPONSIBILITIES</li> <li>Display public habit instances (Habit instance) for that user</li> <li>Allows other users to be searched in a search bar with autocompletion</li> <li>User can see posts of other users they follow (first name, last name, duration, eventDate, optComment, image, location)</li> </ul>	<ul><li>COLLABORATORS</li><li>ForumPost</li><li>User</li><li>HabitInstance</li></ul>

### ForumPostList RESPONSIBILITES Posts passed in forum post to list Retrieves image for user's habit event if exists from database and displays as part of post ArrayAdapter<Forum> COLLABORATORS Forum Habit Instance

FollowerFollowing	AppCompatActivity
<ul> <li>RESPONSIBILITES</li> <li>Sends request to firebase to other users to follow</li> <li>Updates users following and follower lists when requests are accepted or declined</li> </ul>	<ul><li>COLLOBORATORS</li><li>CustomUserList</li><li>User</li></ul>

CustomUserList	ArrayAdapter <user></user>
<ul> <li>RESPONSIBILTIES</li> <li>Used to pass data of other user within the FollowerFollowing activity</li> </ul>	<ul><li>COLLABORATORS</li><li>FollowerFollowing</li></ul>

## Map Fragment RESPONSIBILTIES Allows the user to choose the location of their habit event Provides a default location Gets the best current location of user device Shows location chosen in add / edit habit fragment

MapHelperClass		
<ul> <li>RESPONSIBILTIES</li> <li>Allows user to give permission related to location services for map</li> </ul>	<ul> <li>COLLABORATORS</li> <li>MapFragment</li> <li>EditHabitEventFragment</li> <li>AddHabitEventFradment</li> <li>Home Activity</li> </ul>	

Notification Ac	AppCompatActivity
<ul> <li>RESPONSIBILITIES</li> <li>Displays notification list ( follow requests from other users) using database</li> <li>User can click on request to accept or decline</li> </ul>	<ul> <li>COLLABORATORS</li> <li>AcceptDeclineFollowRequestFragment</li> <li>User</li> </ul>

NotificationsListAdapter	ArrayAdapter <user></user>
<ul> <li>RESPONSIBILTIES</li> <li>displays list of notifications in the notification activity</li> </ul>	<ul><li>COLLABORATORS</li><li>Notification Activity</li><li>User</li></ul>

OtherUserScreen Activity	AppCompatActivity
<ul> <li>RESPONSIBILITIES</li> <li>Displays another users home profile screen (userID, followers, following, and list of habits if current user follows that user)</li> </ul>	<ul><li>COLLABORATORS</li><li>ForumnPostList</li><li>Database</li><li>User</li><li>Habit</li></ul>

ToDoEventsListAdapter	ArrayAdapter <habit></habit>
<ul> <li>RESPONSIBILTIES</li> <li>Provides a custom layout for the habits that are to do on the specified day, in the user calendar page.</li> </ul>	<ul><li>COLLABORATORS</li><li>UserCalendar</li><li>Habit</li></ul>