

Balance4Good

Project Organization

- **Classes**

- **AppDelegate:** The starting point of the application. Here the default values of the different settings variables are set (if they are not already set). Similarly the AWS Service is configured here.

- **DataClasses**
 - **TestDetails:** Class that holds information (such as test_id, dataPoints (accelerometer and gyrometer values with timestamps, shoe size, floor type etc.) about the current test. This class also contains method for starting (initializing) and ending (and returning JSON) the current test.
 - **TypeClass:** This class hold 4 letters abbreviation and full names for the three different types (Shoe Type, Floor Type and Sensor Location).

- **AWS:** Contains the AWS helper files. These files are part of the AWS Framework
- **SensorTag_Files:** Helper files provided by TexasInstruments. These contains different properties and helper methods used for getting data from TI SensorTag.
- **Picker View:** The drop-down list that gets displayed when shoe type, floor type or sensor location down arrow is clicked (in **StartTestViewController**).

- **View Controllers**
 - **PersonalInfoViewController:** This class is used to save/change The Personal Information of the tester.
 - **SettingsViewController:** Class for setting/changing the different settings (such as sensors update rate, maximum walk time, aws bucket name etc.) related to the app and AWS.
 - **StartTestViewController:** This is displayed when a test is about to start. The personal data of the user is displayed here along with options to selecting the

floor type, shoe type and sensor locations. It also shows the status of the sensors.

- **TestViewController**: It displays the progress of the test. It displays the elapsed time as well as the number of data points (sensor value pairs) captured. When a test is stopped, all the values are stored as files inside the phone.
 - **WelcomeViewController**: The main dashboard to the application.
 - **InstructionsViewController**: The instructions on how to run the app (for user of the app)
 - **TestCompleteViewController**: It displays text to user that test has been completed and is stored in the phone. It gets displayed after a test is stopped.
 - **UploadDataViewController**: This gives the ability to upload the saved files to AWS. When there is no data/files, NoDataToUploadViewController gets displayed. In case of success, UploadDataSuccessViewController gets displayed and in case of failure for one or more files, UploadDataFailureViewController gets displayed.
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- **Frameworks**
 - **AWSiOSSDKv2.framework**: This is the framework used for uploading data to AWS. All the other frameworks (added to the project) are required by this framework.