CS408
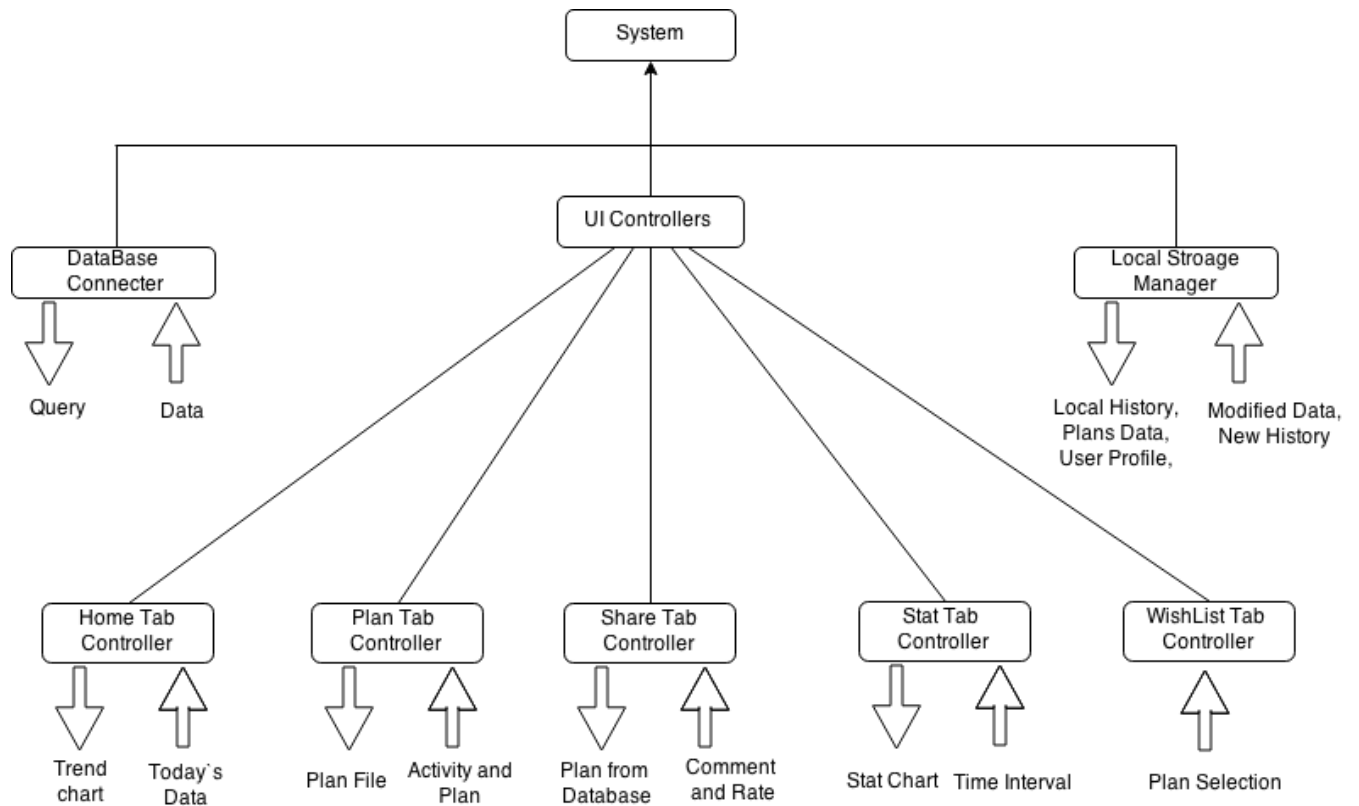
Fitness Tracker Pro

Sprint 2 Incremental and Regression Testing

Tianyang Yu, Jing Chang, Zhicheng Zhou

Yuying Wang, Hanchen Li

Dependence Components:
Database Connector and Local Storage Manager depend on UI Controller, because the data for I/O come from GUI and user input.
Database connector is called by UI Controller to store and retrieve data
Local Storage Manager is called by UI Controller to store and retrieve data.

And the UI controllers depend on the five sub-UI-controllers because they deal with the specific interaction with user.

We choose bottom-up testing. Since we write each components first, it will be easier, efficient, and time-saving to test each components and fix all bugs. And also we can expose bugs as early as we can, before the program becomes a chaotic collection of bugs.

Incremental Testing

Defect#	Description	Severity	How To Correct	Component
1	Application should not allow username that contains special characters	2	Check the username when user finished the register form	Main Layout Controller
2	Application should automatically add plan of yesterday or earlier to history file	1	Check the date when we load data from today's plan	Homepage Tab Controller
3	Do not have a method to allow other component get the average rating of a shared plan	1	Create the certain method in the Database Connector component.	Database Connector
4	The current plan is merged with the "wish" plan when using the "apply" button in the popup dialog for a certain plan in the wishlist, not replaced.	2	Erase all the activities in the current plan and make a fresh copy of the wished plan and save it as the new current plan.	Wishlist Tab Controller
5	Application should list the plans that filtered by user	3	Add checkbox for user to select categories	Share Tab Controller
6	Application should list enough plans for user	3	when user change the filter condition (checkbox), application reload plans from server	Share Tab Controller
7	Application should not accept input from the user if not all the fields are filled out when register or log in.	1	Add listeners to all the fields, enable the "confirm" button only when all the fields are filled out.	Main Layout Controller
8	The index of the DayPlan List is not correct	1	Call List(int index, DayPlan) instead of List(DayPlan)	DataBase Connector

9	The graph should display properly when there are large amount of data in the history file.	1	Redesign loading function in the stat tab	Stat Tab Controller
10	Shared plans returned did not order in correct sequence. They are supposed to order by average rating	2	Change query when selecting all the shared plan and join the rating table	Database Connector
11	The "share button" in the Plan Tab should be set as disabled when the user does not log in.	2	Add a condition checking for the "share" button	Plan Tab Controller

Regression Testing

Defect#	Description	Severity	How To Correct
1	The graph in the Stat Tab does not display properly if there exit some days do not have any activity record in the history.fitness file, which is written by the HomePageController.	1	Redesign IO functions in Home Tab Controller. For days do not have any activity record, Home Tab Controller should simply just put date in the history file so Stat Tab Controller can identify dates with no record.
2	After fixing defect #5, it doesn't act correctly when we check none of the checkboxes	1	Fixed it.
3	After fixing defect #10, program is slower and lack of plans when their rating is null	2	Instead of changing query, add parameter to sort share plans by average rating in the list at the end