

Requirements Specification

For Project Avocado

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1 Domain

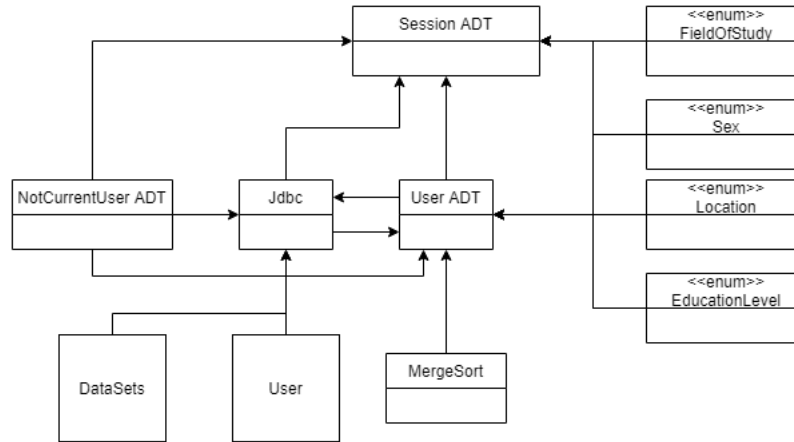
The stakeholders are recent Canadian post-secondary graduates residing within Canada with student debt. Their concerns are their ability to stay motivated in the repayment of their loans. Their expectations are to receive a level-playing-field score that motivates them to pay off their loans ahead of schedule. The knowledge of the domain in this case would be financial information of recent post-secondary graduates in Canada.

2 Functional Requirements

2.1 Requirements List

1. Calculates a user score.
2. Has an account system.
3. Can create an account.
4. Can log into a previously created account.
5. Account information is stored upon creation.
6. Account information is loaded upon logging in.
7. Has a leaderboard of top users.
8. Has a leaderboard centered on current user.
9. Displays user score.
10. User can opt into leaderboard.
11. User can opt out of leaderboard.
12. User can add friends.
13. User will have friends suggested to them.
14. Displays leaderboard of friends.
15. Can accept new current debt from user.
16. Can update user's current debt based on input.

2.2 Class Diagram



- The partitioned boxes represent java classes.
- The squares represent portions of the database. 'DataSets' represents the public datasets used in the project. 'User' represents the portion of the database containing user information.
- The arrows represent uses relationships. The item at the head of the arrow uses the item at the tail of the arrow.

3 Non-Functional Requirements

1. Reliability

- (a) The application must follow security practices to secure user data.
- (b) The user must feel the application secures their data
- (c) The application must be reliable in storing user information.
- (d) The application must be reliable in allowing a user to opt out of the leaderboard.
- (e) The application will provide a more accurate score to user's with a graduation date closest to 2014.

2. Accuracy of Results

- (a) The application must provide a user score that accurately reflects changes in the user's payment habits.
- (b) The application must provide a user score that provides a reasonable level of fairness in the correction for external factors.
- (c) The application should provide an accurate ranking based of users based on assigned score.

3. Performance

- (a) Performance must not be so slow as to have a negative impact on user experience on typical modern devices.

4. Human-Computer Interface

- (a) Has functional user interface.
- (b) Has palatable user experience.

4 Requirements on the Development and Maintenance Process

One quality control procedure that is followed for this project is to have all members work on individual branches. Each change will be reviewed by the project lead before the member's branches are merged back into the main branch. Another quality control procedure that we use is code inspection, as well as testing the programs by running them, and peer user experience testing. As the project is over there are no more required functions however if it were to continue the next priority would be the implementation of a graphical user interface.