CS3307A – Acuity STAR Project – Team Peach Stage 2 – Use Case Diagram
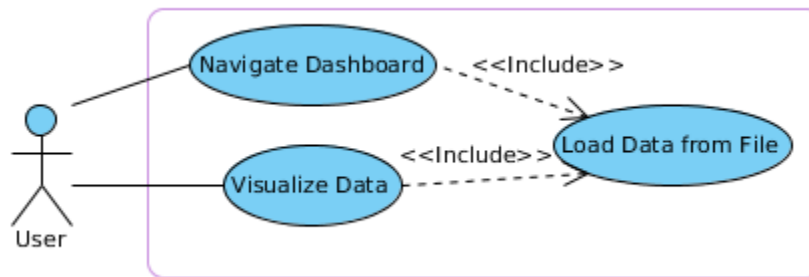

Above is the use case diagram for the Acuity STAR project application. A user refers to anyone running the program, be it a faculty member, department manager, or anyone authorized to use the program. Each user has two use cases, namely "Navigate Dashboard" and "Visualize Data". Each of these use cases correspond to a customer requirement: Navigate Dashboard addresses the dashboard screen requirement (details in Appendix B of the Project Summary provided by the customer), while Visualize Data addresses the visualizations requirement (details in Appendix C of the Project Summary provided by the customer). Note that both of these use cases include another use case, "Load Data from File", which addresses the CSV file data processing requirement (details in Appendix A of the Project Summary provided by the customer). Below are the texts for each use case:

Navigate Dashboard (Sea Level)

Main Success Scenario:

1. User loads data from file
2. System displays dashboard (all view types implemented for Stage 2)
3. User selects dashboard sections to expand/collapse
4. System displays updated dashboard with expanded/collapsed sections

Extensions:

2a: User applies date filter

.1: User modifies begin and/or end year in date textbox

.2: System displays updated dashboard with applied date filter

Visualize Data (Sea Level)

Main Success Scenario:

1. User loads data from file
2. System displays dashboard
3. User goes to Graph tab

4. System displays graph (all minimum visualizations implemented for Stage 2; pie charts used for aggregate data, bar charts for individual faculty member data)

Extensions:

2a: User applies date filter

.1: User modifies begin and/or end year in date textbox

.2: System displays updated dashboard with applied date filter

Load Data from File (Sea Level)

Main Success Scenario:

1. User clicks Load button
2. System displays file structure
3. User selects file type
4. System verifies file is of proper type (all files types implemented for Stage 2)
5. System loads file

Extensions:

4a: File is of invalid type

.1: System displays error message: "This is not a <file type> file"

5a: Missing mandatory data fields

.1: System displays warning message: "File contains <number of records with missing fields> records with missing mandatory fields. Do you want to edit these entries or discard?"

.2: User chooses option to either edit or discard the missing data fields.

.2a: User selects option to edit missing data fields

..1: System displays data editing dialog box

..2: User edits and saves data

..3: System reloads edited data

.2b: User selects option to discard missing data fields

..1: System reloads data without records containing missing data fields