*Florida International University*

*School of Computing and Information Sciences*

Software Engineering Focus

Feature Document

User Story #**213**

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**User Story** Create “Class Ranking” Page for Assignments (Backend)

* As a front-end developer, I want to be able to fetch student statistics about tasks completed per assignment, so that I can populate the class ranking page.

**Acceptance Criteria**

* An endpoint is created that returns all students’ task completion percentage for an assignment, given an assignment id.
* Proper messages are returned if the assignment doesn’t exist
* Only data about students who are enrolled in the assignment should return
* If a student has no tasks added to the assignment, they should not be part of the data.

**Use Case** #**213 – Fetch Assignment Collaboration Data**

**Actors**

Front-end developer

**Entry Conditions**

Front-end developer has access to a terminal or an api to send http requests

Front-end developer has read the documentation and understands which api endpoints to hit and what data to send

Front-end developer has the id of the assignment

**Flow of Events**

1. Use case starts when front-end developer sends an http request to the backend collab endpoint with a user token as a header and the id of the assignment
2. The backend authenticates the user
3. The backend queries the database for the assignment
4. The backend queries the database for all the users that have joined that assignment
5. For each user in the query set, the backend queries the database for all the user’s tasks
6. The backend calculates each user’s task completion percentage and returns the data to front-end developer as a response, and the use case ends

**Alternate Flow of Events**

* 2a.
  + The backend determines the token does not belong to an existing user and the use case ends.
* 3a.
  + The backend determines the assignment does not exist and returns an error to front-end developer as a response. The use case end.

**Use Case Diagram**



**Sequence Diagram**



**Class Diagram**



**Unit Test**

**Test Case 1 (Sunny Day)**

**Purpose**

* Ensure backend returns an array of user percentages per assignment

**Precondition**

* Http request is made to the server at the collab endpoint

**Input**

* User token, Assignment PK

**Expected Result**

* Array of user names and percentages for the assignment given

**Actual Result**

* Array of user names and percentages for the assignment given

**Test Case 2 (Rainy Day)**

**Purpose**

* Ensure backend returns a proper error message when the assignment doesn’t exist

**Precondition**

* Http request is made to the server at the collab endpoint

**Input**

* User token, Assignment PK

**Expected Result**

* Error message saying the assignment given doesn’t exist

**Actual Result**

* Error message saying the assignment given doesn’t exist

**Visual User Guide**



