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Drop the Code

<https://github.com/petetetete/cs386-project>

D2.2 – Use Cases

CS 386 – Software Engineering

Spring 2017

Marco Gerosa

**References:**

<http://epf.eclipse.org/wikis/openup/core.tech.common.extend_supp/guidances/checklists/use_case_C5362874.html>

<http://epf.eclipse.org/wikis/openup/core.tech.common.extend_supp/guidances/concepts/use_case_BB199D1B.html>

<https://en.wikipedia.org/wiki/Actor_(UML)>

<https://en.wikipedia.org/wiki/Use_case>

<https://www.batimes.com/articles/use-case-goals-scenarios-and-flows.html>

**Use Case Diagram:**

Actors: Student, Educator, Puzzle Creator, Maintenence

C:\Users\ph289\Downloads\Use Case Diagram.png

**Use Case Descriptions:**

*Hayden’s Use Case*

**Use Case:** Selecting a Puzzle to Solve

**Actor:** Any User

**Description:** The user will be able to choose from a list of puzzles to solve

**Preconditions:** The user must have the app downloaded and open.

**Post-conditions:** The puzzle is complete and waits for the user to move onto the next puzzle or go back to the main screen.

**Main Flow:**

1. The user selects the Puzzles tab on the home screen
2. The system pulls up the list of puzzles the user can choose from
3. The user scrolls through the list of puzzles and chooses the once they wish to work on
4. The system fetches the selected puzzle and displays it for the user
5. The user then works to solve the puzzle

**Alternative Flows:**

\*. At any time, the user may close the application

1. The user can push the Back button to return to the list of puzzles at any time
2. The user is able to push the Home Screen button to take them all the way back to the home screen.

3. The user can push the Next Puzzle or Previous Puzzle button to automatically move to the user to a different puzzle while they are currently in one.

*Gage’s Use Case*

**Use Case:** Educator checking in on student progress

**Actor:** Educator

**Description:** The educator can check on student progress in order to evaluate their skill within the app.

**Preconditions:** The educator must be logged into the app and on the main screen.

**Post-conditions:** The educator will have read the information they need.

**Main Flow:**

1. On the main menu, the user will select the “educator” tab
2. The system will then fetch and display the groups with which the user is an educator.
3. The user will then choose a group to inspect.
4. The system will fetch the data for the students who are signed up in that particular group.
5. The user will then read the information they need.

**Alternative Flows:**

\*. At any time, the user may close the application

1. The user may only progress to the group selection screen before going back to the main screen.

*Peter’s Use Case*

**Use Case:** Challenge Friend to Code Battle

**Actor:** Any User

**Description:** The application user wants to challenge a friend to a coding competition.

**Preconditions:** The user is logged into the application and has a friend registered in the app.

**Post-conditions:** The challenge request is sent and the user is awaiting a response.

**Main Flow:**

1. The user selects the friend list tab
2. The system fetches and displays the user’s online friends
3. The user chooses a friend from the list
4. The system retrieves the friend’s profile info and displays it
5. The user informs the system that they would like to challenge the friend to a Code Battle
6. The system stores and sends the challenge to the friend.

**Alternative Flows:**

\*. At any time, the user may close the application

1. The system does not send the challenge

6. The user may cancel the challenge

7. The system removes the challenge and removes any notification for the other player

*Garrison’s Use Case*

**Use Case:** Changing the difficulty settings

**Actor:** Any User

**Description:** The User will have the ability to change the difficulty settings of the puzzles

**Preconditions:** The user needs to download the application and be registered to change settings

**Post-conditions:** The user must be registered and in the settings tool bar to change difficulty

**Main Flow:**

1. The user will register their application with an email
2. The user will then select the settings app
3. They will then choose the difficulty tab
4. They will select the difficulty that they want

**Alternative Flows:**

\*. At any time, the user may close the application

1. If the user does not register, then they can’t change the difficulty
2. User will have to stick with the default difficulty

**Group Participation:**

Peter – Created the original document structure and templated the use case descriptions. Described a use case.

Hayden – Did a use case scenario.

Garrison – Added one more reference and did a use case scenario.

Gage – Did a use case scenario.