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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

**System Use Case Diagram:**

Actors: Student, Educator, Puzzle Creator, Maintenance

Use Cases: [SPECIFIC USE CASES AND THEIR CORRELATION TO ACTORS]

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

>The educator uses the use case for brain teaser purposes and to help student’s problem solve

>The student will use the use case for problem solving

> The puzzle creator will use the use case to make sure the puzzles are difficult enough for users

>The maintenance will use this use case for the purpose of maintaining the application and making sure no bugs happen on it.

**Use Case Descriptions:**

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| *Hayden’s Complete 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 has the app downloaded and open  **Post-conditions:** The system is displaying the appropriate puzzle  **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   **Alternative Flows:**  \*. At any time, the user closes the application  1. The system stops attempting to fetch puzzles  \*. The user pushes the Back button to return to the list of puzzles at any time  1. The system fetches the list of puzzles again  \*. The user pushes the Next Puzzle or Previous Puzzle button  1. The system fetches the appropriate puzzle and updates the display |

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| *Gage’s Complete Use Case* |
| **Use Case:** Educator checking a student’s progress  **Actor:** Educator  **Description:** The educator checks a student’s progress to evaluate their skill within the app.  **Preconditions:** The educator is logged into the app and on the main screen.  **Post-conditions:** The educator will be presented the information they need.  **Main Flow:**   1. On the main menu, the user selects the “educator” tab 2. The system fetches and displays the groups with which the user is an educator 3. The user chooses a group to inspect 4. The system fetches the data for the students who are signed up in that particular group   **Alternative Flows:**  \*. At any time, the user closes the application  1. The system removes student progress display |

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| *Peter’s Complete 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 closes the application  1. The system does not send the challenge  6a. The user cancels the challenge  1. The system removes the challenge and removes any notification for the other player |

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| *Garrison’s Complete 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 has the application downloaded and is registered  **Post-conditions:** The user has changed their difficulty setting in the system  **Main Flow:**   1. The user selects the settings button 2. The system fetches and displays the settings page 3. The user selects the difficulty tab 4. The system fetches and displays the difficulty settings 5. The user selects the difficulty setting they want 6. The system saves the user’s new difficulty setting   **Alternative Flows:**  \*. At any time, the user closes the application  1. The system does not change the difficulty  1a. The user does not register an account  1. The system selects the default difficulty settings |

**Group Participation:**

Peter – Created the original document structure and templated the use case descriptions. Provided a use case description and edited other use cases.

Hayden – Did a use case scenario.

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

Gage – Did a use case scenario.