

# **Description of User Stories and Test Cases**

## **Sprint 2**

1. **Answer Highlighted** - We made radio group buttons so when you click an answer the circle becomes filled in and highlighted.

User clicks a radio button. That button's circle on the left is filled which shows its checked. User clicks another button. That button is clicked. The other button is unchecked.

2. **Submit Answer** - We made a submit button that will allow the user to submit an answer choice. If the correct answer is chosen it will highlight green and display a text saying "correct". If an incorrect answer is highlighted then it will become highlighted in red and display a text saying "incorrect" and will decrease the users score. Also if no answer choice is selected it will not let you submit and will display a text saying "no answer choice was selected". We made this using if statements.

User clicks the radio button with correct answer choice and then clicks the submit answer button. The next question button appears.

No answer is selected. The user hits the submit button. A toast message appears.

Submit button is clicked. The answer is correct. The next button appears. The Submit button disappears.

3. **Correct Answer** - We made it so that after submitting an answer if the correct choice was submitted it will highlight it in green so the user knows they got the question correct. We implemented it in the QuestionActivity class by checking if the answer was correct. if is then it will highlight green.

User submits the correct answer. They hit the next button. The text changes to the next question.

Tested that the question object and the answers are made.

Test that the correct answer works.

4. **Incorrect Answer** - We also made it so that after submitting an incorrect answer the choice will become highlighted in red. This is to let the user know that they answered the question incorrectly. We implemented it in the QuestionActivity

class by checking if the answer was correct using an If statement if its incorrect then it will highlight red.

User submits an incorrect answer. A toast message is displayed.

Test that the incorrect answer is set as an incorrect answer.

5. **Show Answer** - We made it so that if the user gets the question correct the answer will be displayed in green. Alternatively if the user got 3 answers incorrect the the three incorrect choices are highlighted in red. We made a method that takes away the hint and submit answer buttons and only lets you hit the next button after the user has the correct answer or three incorrect answers.

User picks and submits all the incorrect answers. The next question button appears. Submit button disappears.

6. **Level Repeat** - We gave the option to repeat levels incase a user doesn't feel confident in their abilities in a particular section. We set up a button at the end of the lessons to take you back to the start.

User makes three mistakes on the challenge. Text appears and says, "An 80% or better is required to unlock the next lesson" appears when score is less than 80%

User finishes the challenge and hits repeat challenge. The first question from the same lesson appears.

7. **Hints** - We added a button to display hints on the questions page incase a user gets stuck or confused on a question. The hints are pulled from a library that also includes the questions and answers.

User hits the hint button. A hint shows up.

Hints stored in the Library.java get transferred into an array for that lesson. Tested for each lesson.

8. **Progress Bar** - We made a progress bar to let a user know how much progress they have made. It takes the total number of questions completed and divides it by the total amount of questions. We made it by using a static variable between the homepage and the questions activity.

User is in the homepage.

Progress bar at the top is filled depending on how much the user has progressed.