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CUS 1172

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Deliverable 4.1: Individual Project

1. Identify all software requirements (including functional, non-functional) that your solution is expected to meet according to the problem specification descriptions. Write all requirements in a tasklist format and group them in functional-non-functional and system requirements.

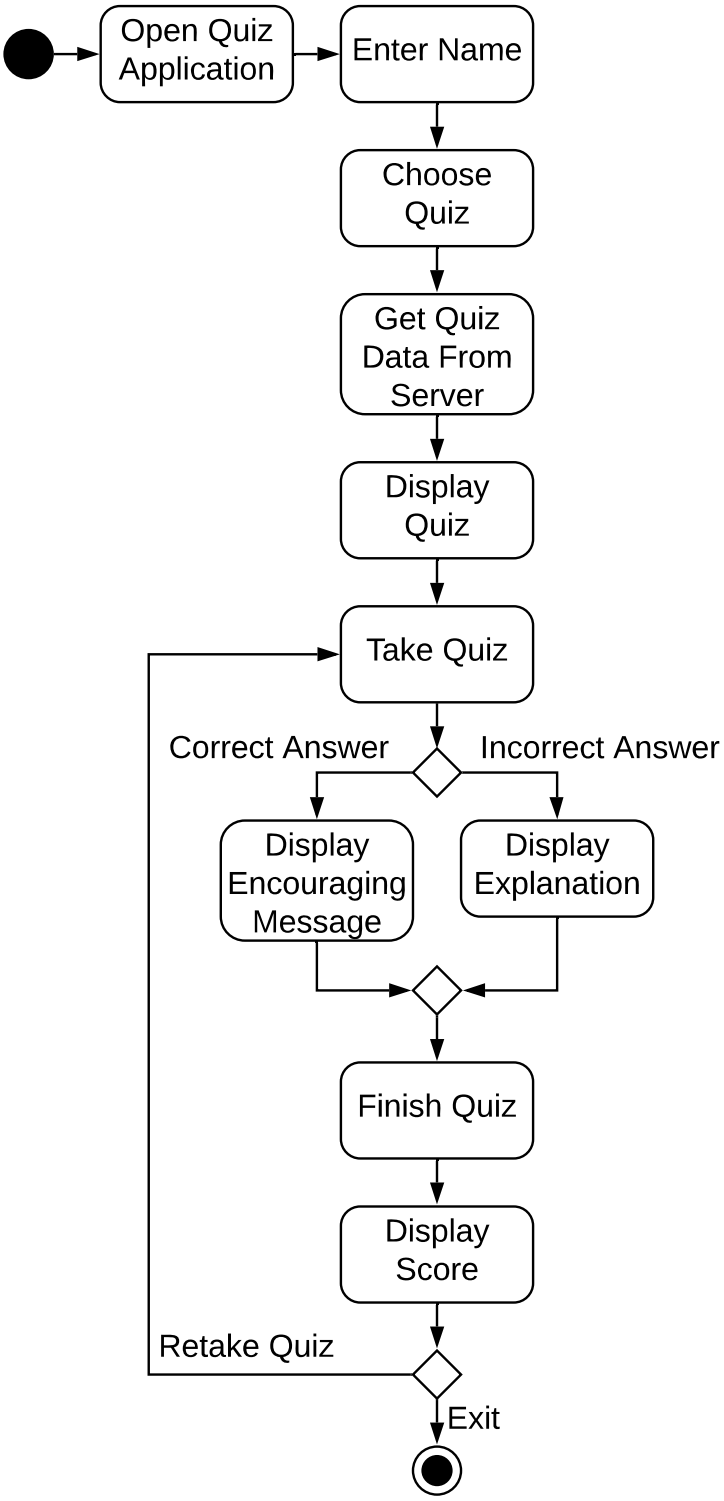
Functional Requirements:

- Get and save the name of the user through an input form
- Users should have the option to choose which quiz they want to take, which appears on the screen accordingly.
- Prompt the user with one question at a time
- Check to see if the user's answer is correct or not
- Prompt a new question after the user answers a question
- Must exhaust all questions before quiz ends
- Keep track and display the user:
    - Number of questions answered
    - Time elapsed
    - Score
- Determine if the user passes or fails the quiz
    - >= 80 is passing. Display "Congratulations <name>!"
    - Else, they fail. Display "Sorry <name>, you failed the quiz"
- User should be able to retake quiz or return to main page

Non-function Requirements:

- Have 2 quizzes available to the user
- The quiz should appear in a separate view within the application
- Each quiz includes different types of questions with unique correct answers
- If answer is correct, give encouraging message that should last 1 second and then gets hidden
- If the user gets the wrong answer, user gets feedback and then has to click a button "Got it" before moving onto the next question
- Quiz information should be loaded asynchronously from an API
- Utilize JSONPlaceholder to store your data
- Use either Promises or Async/Await
- Need 5 different question types
- Each quiz should have at least 20 questions
- Questions must relate to computer science
- Application should be a single-page application
- Must style page using Bootstrap and CSS
- Host application on Netlify

2. Analyze the problem specification and create a UML activity diagram to model the processes and workflow of the use-cases identified in the problem description.



3. Produce a design for a software solution that meets the functional requirements of the use case identified in the problem specification of the individual project (milestone one). Specifically, create a detailed sequence diagram (UML diagram) that models the design of the use-case identified in the problem description.