

EXPERIMENT-6

6) Draw a Use case diagram to model for a quiz system. A user can request a quiz for the system. The system picks a set of questions from its database, and composes them together to make a quiz. It rates the user's answers and gives hints if the user requests it. In addition to users, we also have helpers who provide questions and hints. And also, administrators who must certify questions to make sure they are not too trivial, and that they are correct

Aim:

To design a Use Case Diagram for a Quiz System, illustrating the interactions between users, helpers, administrators, and the system.

Procedure:

1. Identify the Main Actors

- **User:** Requests a quiz, answers questions, asks for hints, and receives a score.
- **Helper:** Provides new questions and hints.
- **Administrator:** Certifies questions for correctness and difficulty level.
- **Quiz System:** Generates quizzes, evaluates responses, and provides hints.

2. Define Use Cases for Each Actor

User

- Request Quiz
- Answer Questions
- Ask for Hints
- Receive Score

Helper

- Provide Questions
- Provide Hints

Administrator

- Certify Questions
- Validate Difficulty

Quiz System

- Select Questions
- Generate Quiz
- Evaluate Answers

3. Establish Relationships

- **User ↔ Quiz System:** User interacts with the system for quizzes and hints.
- **Helper ↔ Quiz System:** Helper provides questions and hints.
- **Administrator ↔ Quiz System:** Admin certifies and validates quiz questions.

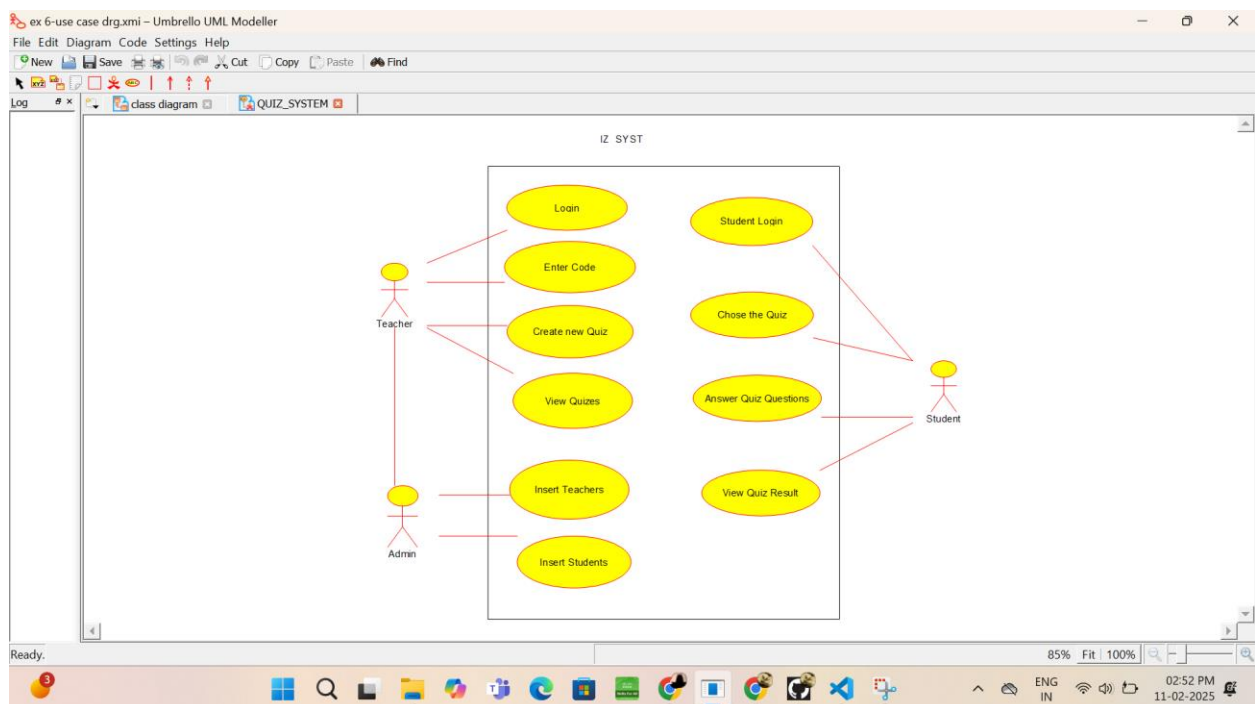
4. Draw the Use Case Diagram

- Represent **actors** as stick figures.
- Represent **use cases** as ovals.
- Connect actors to use cases with **associations**.

5. Verify the Diagram

- Ensure all system functionalities and actor interactions are represented.

Diagram:



Result:

A **Use Case Diagram** for the **Quiz System** was successfully designed, showing the roles of users, helpers, and administrators in quiz generation and evaluation.