Derivco Winter School Movie Quiz

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Introduction

Movie Quiz is a web and mobile based application that allows a user to play through a series of movie-based quizzes. Each correctly answered question will increase a user's score. The faster you answer, the more points you get. Users can choose from a variety of genres to be quizzed on.

User Characteristics

- Administrators - Administrators users will include members of the Derivco Winter School team. Administrators will be able to create, edit, and delete questions and categories on the system.

- Players - Players are the end-users of our system. They will be able to register a new account, log in to the system and play through the quizzes. They will also be able to access the leaderboard.

Domain Model
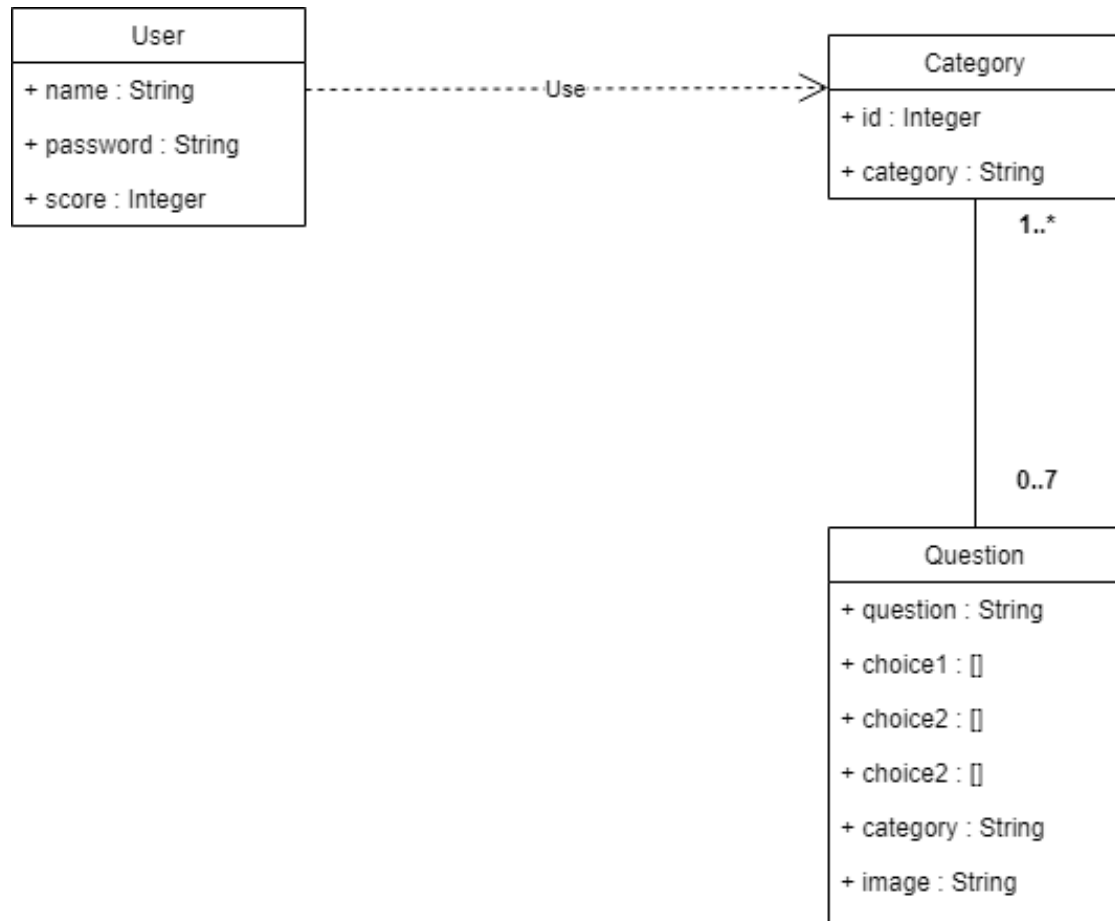
The following is a rough domain model of our system:

Figure 1: Domain Model

Functional Requirements

R1. Users should be able to interact with the system through a web interface frontend.
R2. Users should be able to register their account.
    R2.1. Admin users should be able to delete any regular user's account.
R3. Users should be able to login with their account.
R4. The system should restrict further application functionality to logged-in users.
R5. Users should be able to begin a quiz.
    R5.1. Users should be able to select a category to be quizzed on.
R6. Users should be able to complete a quiz.
    R6.1. Users should be able to submit answers for a quiz question.
    R6.2. Each quiz should be complete after seven questions have been completed.
    R6.3. The system should only allow for 10 seconds per question.
R7. Users should have a running score that is dependent on how quickly they correctly answer a question.
R8. Users should be able to view a leaderboard.
    R8.1. The leaderboard should only contain the top 25 users.
R9. Users should be allowed the opportunity to play again.

Technology

The following techonologies will be/are utilized in the development and function of the Movie Quiz system:

- MongoDB database.

- Angular 7 for frontend web application.

- Mocha and Chai for Unit and Integration testing.

- NodeJS for the servers and APIs.