

DS – Project

In this project you will build a Trivia game application. This project requires usage of Python, Pandas, Matplotlib, and SQL server.

Part I

In this part you will allow the user to play Trivia games using the questions from the Open Trivia API, which provides a free JSON api at https://opentdb.com/api_config.php,

When the application starts, it will allow the user to enter his/her name, and then choose one of the following options:

1. Play a Trivia game
2. Display game statistics

After choosing the first option, the system will ask the user to enter the following details:

1. Which category to choose the questions from (a list of categories can be obtained from https://opentdb.com/api_category.php)
2. The desired difficulty level (Easy, Medium, Hard)
3. The number of questions

Then the system should display to the user random Trivia questions according to his/her choices. When the game finishes, the system should show how many questions the user has answered correctly.

Choosing the option of displaying game statistics will allow the user to see one of the following:

1. A bar plot that shows the number of correct/incorrect answers received in each category.
2. A bar plot that shows the number of correct/incorrect answers received in each difficulty level.
3. A table showing the three users with the highest Trivia score

Part II

In this part, you will allow the user to add new questions to the Trivia game. To that end, the system should have a database for storing the new Trivia questions.

Each Trivia question has the following fields:

1. Category
2. Difficulty – Easy, Medium or Hard
3. Type of question – Multiple Choice or True/False

For each question, you need to store the correct answer and a list of incorrect answers.

When starting a new game, the questions should be randomly selected from both the system database and the Open Trivia questions.