



Al Imam Mohammad Ibn Saud Islamic University
College of Computer and Information Sciences
Computer Science Department

Course Project

(CS38 – Internet Technologies)

**(Spring 2021)
(1442 –2021)**

Description

This project is divided into two parts:

- **Part 1:** Build a client-side Quiz App. This part is a guided project, and you are required to enroll in the course listed below, watch the videos, write the code from scratch (do not use the provided source code), and have your own touch to the app (in styling).
- **Part 2:** Build the server side of the app. In this part, you must use PHP and connect to databases. You have to implement user authentication (i.e. create user accounts and allow sign in into the app using passwords). In addition you need to implement a global leaderboard that ranks the user names according to their results. If you implement the feature of Real time competition between users using websockets the team will receive a(1 mark bonus).

Udemy Course

In part 1 of the project, you are asked to follow and learn from a Udemy course: “Build a Quiz App with HTML, CSS, and JavaScript”. In this 2-hour course, you're going to learn how to build a Quiz application **without the assistance of libraries or frameworks**. Here are some of the topics:

- Save high scores in Local Storage
- Create a progress bar
- Create a spinning loader icon
- Dynamically generate HTML in JavaScript



- Fetch trivia questions from Open Trivia DB API

The course provides the source code for the app, and you are free to take a look into it. However, you will have to write your own code from scratch. You may compare your code with their code, to fix bugs for example, **but copying the code is prohibited.** Please note that the Udemey course might introduce some topics of newly introduced Javascript features that are not covered in the textbook. These topics are not excluded from the course, and might appear in the final exam as Bonus questions. The link to the course: <https://www.udemy.com/course/build-a-quiz-app-with-html-css-and-javascript/>

Team work

You are required as a team to use [Github](#) as a platform for sharing and collaboration. Your instructor will periodically look into the repository history, members commit changes and progress over time. The Github activity is part of your final evaluation. Each group will have 2~4 Students from the same section, and each member should contribute equally to the project.

Project Report

Each team is required to write a report about the project. The report should be written in the repository wiki and README file. The documentation should provide an overview of the system and help readers understand the underlying technologies. The repository should have at least the following:

- Overview: An overview of the app, its goals, some screenshots, underlying technologies, etc.
- User Interaction: a flow chart of the complete user journey through using the app (example: [link](#)). Use autotamted software to create the flow chart.
- Web application testing: provide unit test cases (such as in this link <https://www.guru99.com/test-case.html>).

Project Evaluation

The evaluation of the project will be on:

- The source code. (5pt)
- The course report. (5pt)
- The demo and evaluation meeting. (10pt)