



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

Course Title:	Web Development
Course Code:	CS346
Course Instructor:	<i>Dr. Mohammed Asif, T. Afnan AlMoammar</i>
Project:	Course Project
Semester:	1 st Semester, 2024
Due Date:	24/10/2024
Marks:	20

Instructions:

1. Make sure to follow all the parts of the project and complete them.
2. Work as a team

Project Evaluation	CLOs	Marks
The source codes	S2,S3	5
The course reports.	K1, S2,S3	5
The evaluation meeting.	K1, S2,S3	10
Total		20

Description

Your final project will consist of developing a web application using the skills you've honed all semester. Instead of being handed a predetermined web program to copy, you are allowed to choose what you'd like to make. We are giving you some restrictions on what you can make, such as a list of technical and style requirements.

HTML/CSS:

- Use tags semantically as we have done all semester.
- No deprecated tags.
- You can use Bootstrap.

JavaScript:

- Must write object-oriented JavaScript.
- Must use ES6 classes.
- Avoid global variables.
- OK to use global for constants, instantiating classes, or other reasonable scenarios
- But you should not put anything in a global variable that could be better encapsulated in a class
- Communicate between classes using call-backs or custom events.
- You must write raw JavaScript, as we have done all semester

Backend:

- Your backend must be written using the Node and Express libraries
- Don't save data to the file system: persistent data should be stored in a MongoDB
- HTTP methods should be used in ways that are compatible with the method definition. For example:
- Use GET for retrieving data. Do not write data in a GET handler.
- Use POST for saving data (CRUD operations). Do not use POST to display a page.
- Don't use query parameters with POST
- Authenticate user login in each page of your website.

The best score will be based on:

- **Most beautiful:** Given to the most aesthetically pleasing final project
- **Best code:** Given to the final project with exceptionally well-written code
- **Most fun:** Given to a really fun final project
- **Best in show:** Given to the all-round most impressive final project

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 3~4 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 website, flow chart (example: [link](#)), setup, technologies used, its goals, some screenshots, future work, resources, and team members.

Deliverables

- A working REST API, built by you that runs on a local server.
- The URL of the GitHub repository for your app.
- The URL of the slides for your presentation.
- Adequate and complete documentation in the README.md file.

Presentation Structure

- ❖ What is your project?
- ❖ How does it work?
- ❖ Why did you choose it?
Technical Challenge (1-2 slides):
- ❖ What was the most important technical challenge you faced?
- ❖ How did you overcome that challenge?
Big Mistake (1-2 slides):
- ❖ What was the biggest mistake you made during this project?
- ❖ What did you learn from it?
Demo Slide (1 slide):
- ❖ literally says “DEMO” with a link to your project so you can open it easily
Closing Slide (1 slide):
- ❖ your project’s name, your name & a “Thank You”
- ❖ Total: 7-11 slides

Presentation Structure Notes

- Don’t include a slide just for the technologies.
- Don’t include any code in your slides. Nobody will read it.
- Don’t include a slide for GitHub graphs.
- Don’t go into detail about how the app works. Your demo is where you want to do that.