

Assignment #4

Introduction to Web Development with Flask

Objective:

To create a basic yet comprehensive Flask web application, introducing students to core web development concepts using Python. This assignment is aimed at students who have recently started learning Python and are new to web development.

Task Overview:

Develop a Flask web application a "Personal Portfolio" site. The focus is on understanding Flask's capabilities and applying basic web development principles.

Based on practical task #4, complete the following tasks:

1. Flask Setup and Basics:

- Install Flask and initiate a basic Flask application.
- Create a main home page using HTML

2. Routing and Multiple Pages:

- Implement several routes/pages like 'About' and 'Projects'.

3. Static Files and Styling:

- Include a static folder with CSS files for styling your web pages.
- Optionally, incorporate images and basic JavaScript for interactivity.

4. Data Handling and Display:

- Use Python data structures (list, dictionary) to store simple data.
- Display this data on your web pages.

5. Forms and User Input:

- Create a simple contact form and handle form submission using Flask.
- Understand how to receive and process user input.

6. Basic Data Storage:

- Write and read data from simple files (like text or .csv files) instead of a database.

Defense questions:

- 1) How can you handle HTTP POST and GET requests in Flask?
- 2) Explain the purpose of the static folder in a Flask application.
- 3) How did you link a CSS file in your Flask application to style your web pages?
- 4) Discuss the method you used for storing and retrieving data in your application.
- 5) Describe how you created and processed a form in Flask. What methods did you use to handle form submission?
- 6) What new skills or concepts did you learn from completing this assignment?

Form of the Assignment is to provide the report of the tasks in the view of the screenshots of the code/compilation in the docx/pdf format. and submit to the moodle's assignment's box.