

Trainee Assessment Plan

This is a two-day assessment plan to evaluate the intern's proficiency in Python, HTML, CSS, JavaScript, and Bootstrap. The tasks are designed to assess fundamental understanding and application skills.

Day 1: Python Assessment

Task 1: Command-Line To-Do List Application

1. Build a program that allows the user to:
 - Add a task with a name and due date.
 - View all tasks with their statuses (e.g., pending or completed).
 - Mark a task as completed.
 - Delete a task by its name.

Requirements:

- - Store tasks in a list of dictionaries (e.g., {'task_name': str, 'due_date': str, 'status': str}).
- Use clear function-based organization.
- Provide a menu for the user to navigate options.

Sample Menu:

1. Add Task
2. View Tasks
3. Mark Task as Completed
4. Delete Task
5. Exit

Example Input/Output:

1. Add Task

Enter Task Name: Finish Bootstrap Assessment

Enter Due Date: 2024-12-18

2. View Tasks

1. Finish Bootstrap Assessment | Due: 2024-12-18 | Status: Pending

Task 2: Bonus - Extend To-Do List Functionality

1. Add sorting functionality to display tasks by due date.
2. Include input validation to ensure dates are entered in YYYY-MM-DD format.
3. Save tasks to a file and load them when the program starts.

Day 2: Frontend Mini-Project

Task 1: Build a Responsive Portfolio Page (HTML + CSS + Bootstrap)

Requirements:

2. 1. HTML Structure:
 - Create the following sections:
 - Header: Navigation bar with Home, About, Projects, and Contact links.
 - Hero Section: A short introduction with a background image and a call-to-action button.
 - Projects Section: Showcase 3 projects with images, titles, and short descriptions.
 - Contact Section: A form with fields for Name, Email, and Message.
3. 2. CSS Styling:
 - Use CSS to style the navigation bar, ensuring it remains sticky at the top.
 - Add hover effects to buttons and links.
 - Customize project cards with a shadow effect on hover.
4. 3. Bootstrap Features:
 - Use a Bootstrap carousel for the Projects section.
 - Use a Bootstrap grid system to create a responsive layout.
 - Add a modal that opens when a project card is clicked, showing more details about the project.

Task 2: Add JavaScript (Enhancements)

5. 1. Create a JavaScript function that validates the contact form (e.g., Name and Email must not be empty).
2. Add a 'Back to Top' button using JavaScript that appears when the user scrolls down.
3. Make the navigation bar collapse automatically after clicking a link (for mobile view).

Expected Deliverables

6. 1. Day 1:
 - A functional Python To-Do List application with the required features.
 - Bonus features if time allows.
7. 2. Day 2:
 - A responsive portfolio page with sections styled using HTML, CSS, and Bootstrap.
 - Interactive features implemented using JavaScript.