

Lab 01: Mastering JSX & Components

Week 1 Assignment

Overview

Total Points: 100

Objective: Understand the fundamental mental model of React: declarative UI, component composition, and JSX.

Prerequisites

- Node.js installed
- VS Code recommended

Setup

Run the following commands in your terminal:

```
npm create vite@latest lab-01 -- --template react-ts
cd lab-01
npm install
npm run dev
```

1 Task 1.1: Static Profile Card (50 Points)

Goal

Create a reusable functional component that displays user information.

Requirements

1. Create a file `ProfileCard.tsx` in the `src` folder.
2. The component must accept NO props (use variables).
3. Display an image, name, bio, and button.
4. Use inline styles (JavaScript object) for styling.

Grading Criteria

- **10 pts:** Component renders without errors.
- **20 pts:** Correct JSX syntax.
- **10 pts:** Inline styles used correctly.
- **10 pts:** Visual structure matches requirements.

2 Task 1.2: Dynamic Greeting App (50 Points)

Goal

Understand JavaScript expressions inside JSX.

Requirements

1. Create a component `Greeting.tsx`.
2. Capture the current date `new Date()`.
3. Logic:
 - 6:00–12:00: "Good Morning"
 - 12:00–18:00: "Good Afternoon"
 - 18:00–6:00: "Good Evening"
4. Change text color based on time.

Grading Criteria

- **15 pts:** Correctly gets system time.
- **25 pts:** Conditional logic works.
- **10 pts:** Dynamic styling works.