



8 week Internship Project Plan for Kriya

Team Berry

Secure Checklist and Task Management System Development

Introduction

This document outlines an eight-week plan for team Berry. Each team is responsible for specific modules, and the plan is designed for beginners with no prior experience in the required tools (React, Node.js, etc.).

- **Structure:** Each week includes a Learning Phase (essential skills) and an Implementation Phase (tasks to complete).
- **Objective:** By Week 8, all teams will complete their modules, and the app will be fully integrated and functional.
- **Note:** Teams must focus only on the listed skills and tasks to stay on schedule. As per the NDA, no content is to be discussed or shared with anyone, this includes team members outside of your group.

General Notes

- **Regular Standups:** Conduct 15-minute regular meetings to track progress and resolve issues.
- **Setup:** Install Node.js, npm, and VS Code before starting.
- **Resources:** Use free tutorials (MDN Web Docs, React documentation, Node.js guides, YouTube channels like Traversy Media, freeCodeCamp).
- **Version Control:** Use Git and GitHub with private repositories kriya-berry.
- **Support:** Use your Discord channel for quick questions and resource sharing.
- **Testing:** Perform manual testing each week; add unit tests if time permits.
- **Documentation:** Maintain a README in each repository with setup instructions and API details.

Team Berry

Aarush, Animesh, Ayush, Harmish, Mansi & Sarthak

Week 1: Checklist Creation UI

- **Learning Phase:**

- Install tools (Node.js, npm, VS Code).
- Learn React basics: components, JSX.
- Learn form creation and state management in React (useState).
- Learn to handle lists in React (e.g., adding checklist items).

- **Implementation Phase:**

- Set up a React project.
- Create a checklist form with title and items.
- Add functionality to add/remove checklist items.
- Test the UI.

Week 2: Checklist Creation Backend

- **Learning Phase:**

- Learn Node.js basics and Express setup.
- Learn to create API endpoints in Express.
- Learn database basics (e.g., Firebase setup, saving data).

- **Implementation Phase:**

- Set up a Node.js server with Express.
- Create a /checklists API to save checklists.
- Connect the React form to the API.
- Test checklist creation.

Week 3: Task Assignment

- **Learning Phase:**

- Learn to fetch users from the database.
- Learn to update checklists with assigned users.
- Learn to update the React UI with assignment options.

- **Implementation Phase:**

- Create an API to fetch users and assign tasks.
- Add assignment logic to the backend.
- Update React to include a dropdown for task assignment.
- Test task assignment.

Week 4: Progress Tracking

- **Learning Phase:**

- Learn to update task status (e.g., completed, pending).
- Learn real-time updates in React.
- Learn to save task status in the database.

- **Implementation Phase:**

- Create an API to update task status.
- Add checkboxes in React to mark tasks as complete.
- Sync task status with the backend.
- Test progress tracking.

Week 5: Offline Sync

- **Learning Phase:**

- Learn to use localStorage in React for offline data.
- Learn sync logic (push to server when online).
- Learn basic conflict handling.

- **Implementation Phase:**

- Save checklists to localStorage.
- Create a sync function in React.
- Update the backend to accept synced data.
- Test offline functionality.

Week 6: Notifications

- **Learning Phase:**

- Learn notification basics (e.g., email or push notifications).
- Learn to send notifications with Node.js.
- Learn to trigger notifications from React.

- **Implementation Phase:**

- Set up a notification service (e.g., Nodemailer).
- Create an API to send task reminders.
- Add notification triggers in React.
- Test notifications.

Week 7: Checklist Templates

- **Learning Phase:**

- Learn to store and fetch templates in the database.
- Learn to display and apply templates in React.

- **Implementation Phase:**

- Create an API to save and fetch templates.
- Build a template selection UI in React.
- Apply templates to new checklists.
- Test template functionality.

Week 8: Checklist Sharing

- **Learning Phase:**

- Learn sharing logic (permissions, access control).
- Learn to update the database with shared users.
- Learn to add a sharing UI in React.

- **Implementation Phase:**

- Create an API to share checklists.
- Add sharing permissions to the backend.
- Build a sharing button/form in React.
- Test sharing functionality.