**AttachME Project Roadmap**

*Online Industrial Attachment Application System*

**Project Duration:** approximately 2 Months

**Team Members:** 6  
**Management Tools:** GitHub, Trello (this is for task management, so create accounts)

## **🎯 Project Goal:**

To build a user-friendly, and secure online platform that simplifies the process of securing industrial attachments for students, streamlines application management for companies, and ensures transparency through real-time tracking and notifications.

## **👥 Tasks**

1. **Project Manager & Backend Specialist**
   * Oversee project progress and coordinate team tasks.
   * Develop and maintain backend logic, API routes, and system security.
   * Handle user authentication, database integration, and server deployment.
2. **Full-Stack Developer & Database Architect**
   * Design and implement MySQL database schemas.
   * Develop backend CRUD functionality and connect to the frontend.
   * Assist with frontend integration and API testing.
3. **Quality Assurance, Testing & Security**
   * Handle unit, integration, and security testing.
   * Monitor code quality and prevent vulnerabilities.
   * Manage error logging and bug tracking.
4. **UI/UX Designer & Frontend Developer**
   * Design wireframes, mockups, and create the system’s UI/UX.
   * Develop and style frontend components.
   * Ensure mobile responsiveness and accessibility.
5. **Research, Documentation & Presentation Lead**
   * Conduct research for system requirements.
   * Draft technical documentation, proposal and API documentation.
   * Prepare final project presentation and demo materials.

## **📍 Phase 1: Planning & Research (Week 1)**

### **🟩 Key Objectives:**

* Finalize system features and requirements
* Set up collaboration tools (GitHub, Trello)
* Assign roles and responsibilities

### **🛠️ Tasks:**

* Brainstorm and prioritize core features
* Design the project architecture (frontend, backend, database)
* Set up GitHub repository
* Present the project proposal

## **🖌️ Phase 2: Design & Prototyping (Week 2)**

### **🟨 Key Objectives:**

* Visualize the system through wireframes and prototypes
* Define the database schema and overall architecture

### **🛠️ Tasks:**

* Design UI/UX mockups
* Create wireframes for student, company, and admin dashboards
* Finalize MySQL database schema
* Sketch system architecture (data flow)

### **📤 Deliverables:**

* Wireframes and mockups
* Database schema
* System architecture diagram

## **⚙️ Phase 3: Development Sprint 1 (Weeks 3-4)**

### **🟧 Key Objectives:**

* Build core system functionalities (registration, authentication, CRUD)

### **🛠️ Tasks:**

* Set up project environment (Node.js, MySQL,HTML and CSS)
* Develop authentication system
* Create student admin and company registration features
* Build application submission feature

### **📤 Deliverables:**

* Basic working app with secure login and application submission

## **🏗️ Phase 4: Development Sprint 2 (Weeks 5-6)**

### **🟥 Key Objectives:**

* Complete core features and integrate components

### **🛠️ Tasks:**

* Implement real-time notifications (Socket.io or polling)
* Build admin panel for user and application management
* Add application tracking and feedback features
* Connect frontend and backend via REST APIs

### **📤 Deliverables:**

* A fully functional system ready for testing

## **🧪 Phase 5: Testing & Debugging (Week 7)**

### **🟦 Key Objectives:**

* Ensure system stability, security, and performance

### **🛠️ Tasks:**

* Unit testing (frontend and backend)
* Integration testing (API endpoints and database)
* Security testing (SQL injection)
* User testing with sample student and company accounts

### **📤 Deliverables:**

* A stable, tested, and refined system

## **🚀 Phase 6: Deployment & Final Touches (Week 8)**

### **🟩 Key Objectives:**

* Deploy the system and prepare for the final presentation

### **🛠️ Tasks:**

* Deploy frontend on GitHub Pages and backend on a free Node.js host
* Finalize project documentation (user guide, API docs)

### **📤 Deliverables:**

* A live, deployed system
* Complete documentation
* Final presentation

### **📊 Sprint Planning:**

* 2-week sprints (aligning with Trello lists)
* Daily standups (15 mins) to track progress
* Sprint reviews and retrospectives