

HETU PATEL(22BIT126)

WEEKLY REPORT

Week No.:2

Date From: 2nd June 2025

Date To:6th June 2025

Introduction:

During Week 2 of my internship, I enhanced the visual design of the dashboards with advanced CSS and animation techniques. I also worked on integrating MongoDB Atlas, revisited backend concepts like JWT, sessions, cookies, and WebSockets, and added a major module to the project: automatic offer letter generation in PDF format. Additionally, I implemented password recovery and automated email functionality for new users.

Accomplishments:

- Applied advanced CSS styling and animations to improve UI/UX of Admin and User dashboards
- Designed and implemented a complete Offer Letter module:
 1. Created frontend form for admin input.
 2. Developed Mongoose model, controller, and secure API routes.
 3. Enabled automatic PDF generation and download of formatted offer letters using Puppeteer.
- Enhanced authentication flow using JWT to secure protected routes and modules.
- Implemented email automation using Nodemailer to send credentials to new users upon creation.
- Developed secure Forgot Password and Reset Password functionalities using email-based token verification.
- Built backend logic to automatically retrieve and display salary breakdown (earnings & deductions) for each user.

Learning Experience:

- Improved proficiency in React.js for UI design and animations.
- Gained hands-on experience with Puppeteer for backend-controlled PDF generation.
- Learned integration of Nodemailer for real-world email services.
- Deepened understanding of JWT, session vs. stateless auth, cookies, and secure API practices.
- Explored Socket.IO and WebSockets for future use in real-time features.

Goals for the Next Week:

- Implement real-time notification support using Socket.IO.
- Add logging and monitoring for offer letter downloads and password resets.
- Create a secure admin dashboard analytics view for user activity.
- Test all modules for performance and security vulnerabilities.
- Finalize UI polish and responsive behavior across devices.

Feedback and Support Needed:

- Feedback on the Offer Letter module design and download flow.
- Guidance for optimizing Nodemailer for production environments.
- Support for real-time communication setup using WebSockets and Socket.IO.

Conclusion:

- Week 2 was productive. Developed and integrated a complete Offer Letter generation module with automatic PDF download.
- Improved project security by implementing JWT-based authentication and password reset features.
- Added Nodemailer-based email automation to notify users with credentials and reset links.
- Strengthened backend understanding by exploring MongoDB Atlas, cookies, sessions, and WebSocket fundamentals.
- Looking forward to building more real-time features and refining the application further in the upcoming weeks.

(Student Signature)

(Industry Mentor Signature)

(Faculty Mentor Signature)