

Infosys Springboard Virtual Internship 6.0 Completion Report

Team Details

Batch Number: 7

Team C

TrackMile: AI-Powered Smart Delivery & Logistics System

Start date : 11-11-2025

Names:

- Mehek Fatima Shaik – Frontend Development & User Role Authentication
- Tejas Thakor – Backend Development
- Subhashini – Frontend Development
- Harshavarthini – Frontend Development
- Ayush Kale – AI / Machine Learning Integration

Internship Duration: 6 weeks

1. Project Title

TrackMile: AI-Powered Smart Delivery & Logistics System

2. Project Objective

The objective of my contribution to the TrackMile project was to design and implement a responsive and user-friendly frontend interface along with a secure user role authentication system. The focus was on developing login and account creation functionality, enabling role-based redirection for Admin and Driver users, and enforcing protected routes to prevent unauthorized access. Additionally, the objective included integrating frontend components with backend REST APIs for seamless data flow, managing authentication tokens securely to maintain user sessions, and enhancing overall user experience through intuitive navigation, validation, and error handling. Through this work, the aim was to deliver a secure, scalable, and reliable frontend solution suitable for real-world logistics applications.

3. Project description in detail

As part of the TrackMile project, my primary responsibility was frontend development and user role authentication. I worked on building the user interface using React.js,

focusing on clean design, responsiveness, and ease of use. I implemented login and registration functionality that allows users to securely access the system.

After authentication, role-based routing was applied to ensure that users are redirected to the appropriate dashboard based on their role (Admin or Driver). I also worked on integrating frontend components with backend REST APIs to fetch and display real-time data such as delivery details and dashboard information.

Special attention was given to protected routes so that unauthorized users cannot access restricted pages. Overall, my contribution ensured that the application is easy to navigate, secure, and aligned with real-world logistics system requirements from a user perspective.

4. Timeline Overview

Week	Activities Planned	Activities Completed
Week 1	Understanding project requirements and frontend responsibilities	Analyzed requirements related to UI, authentication, and dashboards
Week 2	Designing frontend layout and authentication flow	Designed login, registration, and role-based navigation flow
Week 3	Developing authentication and basic UI components	Implemented login, signup, and protected routing
Week 4	Dashboard UI development	Developed Admin and Driver dashboard interfaces
Week 5	API integration and role validation	Integrated frontend with backend APIs and ensured role-based access
Week 6	Testing, UI refinement, and documentation	Tested authentication flow, fixed UI issues, and finalized frontend documentation

5a. Key Milestones

Milestone	Description
Project Kickoff	Understood project objectives and my role in frontend development and authentication.
Prototype/First Draft	Designed and implemented initial login, registration, and dashboard UI layouts..
Mid-Term Review	Improved UI design and refined role-based routing based on feedback.
Final Submission	Completed frontend integration with backend APIs and finalized authentication flow. .
Presentation	Presented my frontend work, explaining authentication logic and dashboard navigation.

5b. Project execution details

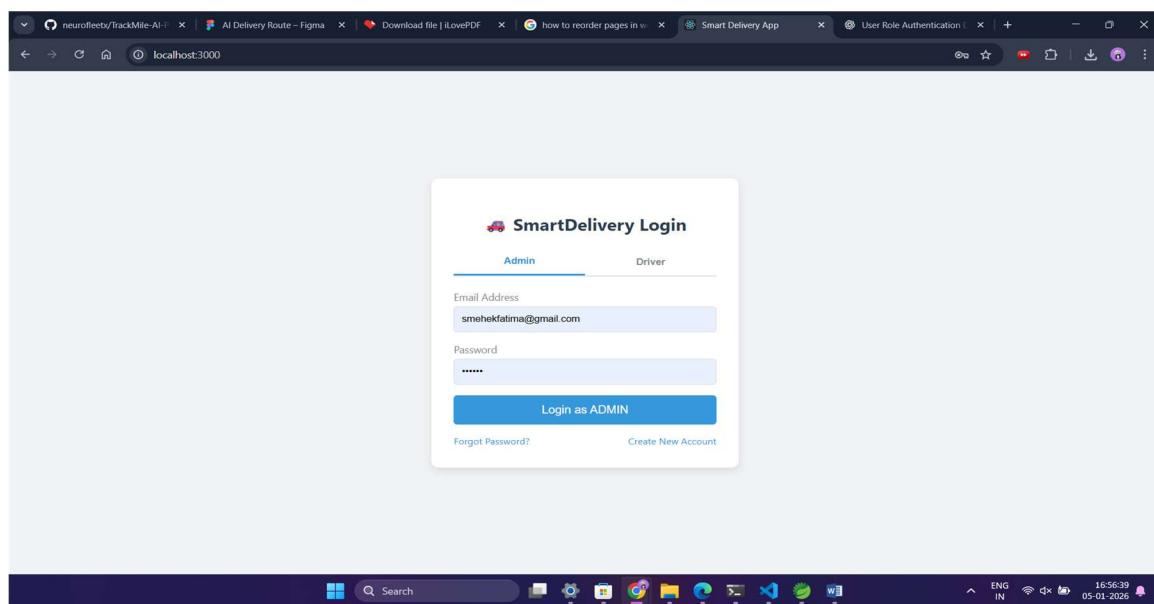
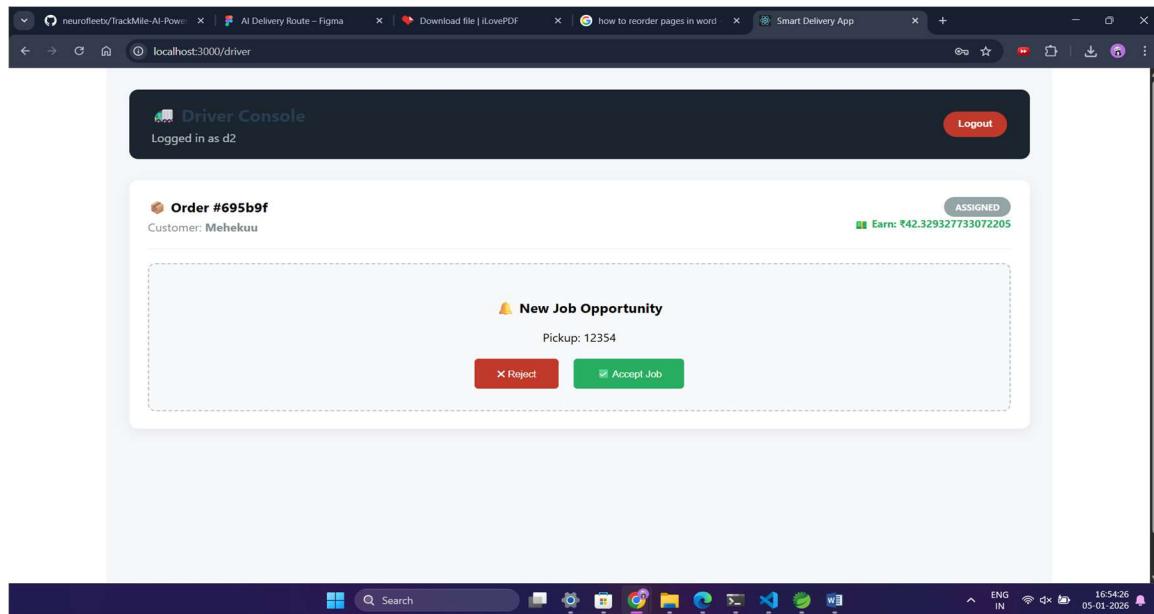
- Requirement Analysis** – Analyzed user requirements related to login, dashboards, and role-based access.
- UI Design** – Designed responsive layouts for login, registration, Admin dashboard, and Driver dashboard.
- Frontend Development** – Implemented React components for authentication and dashboard pages.
- Role-Based Routing** – Ensured users are redirected to the correct dashboard based on role.
- Authentication Handling** – Integrated JWT-based authentication with backend APIs.
- Protected Routes** – Restricted unauthorized access to secure pages.
- API Integration** – Connected frontend components with backend REST APIs.
- Testing & Refinement** – Tested authentication flows and fixed UI and navigation issues.

6. Snapshots / Screenshots

The screenshot shows a web browser window with the URL `localhost:3000/register`. The page title is "Create Account". It contains fields for Role (Driver, Admin, John Doe), Email (abcd@gmail.com), Password (*****), Vehicle Type (Tata Ace, Bike, etc.), and a "Register" button. Below the form is a link "Already have an account? Login".

The screenshot shows a web browser window with the URL `localhost:3000/admin`. The dashboard includes three summary boxes: "Total Drivers" (4), "Active Orders" (2), and "Delivered Today" (0). Below these are sections for "Create New Order" (with fields for Customer Name, Address, Lat, Lng, and Create button) and "Pending & Active Deliveries" (a table with columns ID, Customer, Status, Assigned Driver, and Action). The table data is as follows:

ID	Customer	Status	Assigned Driver	Action
6953e0...	Mehek 10-41	Picked Up	driver1@gmail.com	<button>View Map</button>
6953e5...	Subhashini 11-11	Assigned	Select Driver...	<button>Assign</button>



The screenshot shows the Admin Dashboard of the Smart Delivery App. At the top, there are three summary boxes: 'Total Drivers' (4), 'Active Orders' (3), and 'Delivered Today' (0). Below these is a 'Create New Order' form with fields for Customer Name, Address, Lat, Lng, and a 'Create' button. The main section is titled 'Pending & Active Deliveries' and displays a table with three rows:

ID	Customer	Status	Assigned Driver	Action
6953e0...	Mehek 10-41	Picked Up	driver1@gmail.com	View Map
6953e5...	Subhashini 11-11	Assigned	driver2@gmail.com	View Map
695b9f...	Mehekkuu 12354	Assigned	driver3@gmail.com	View Map

The screenshot shows the login page for the Smart Delivery App. It features a title 'SmartDelivery Login' with tabs for 'Admin' (selected) and 'Driver'. The form includes fields for 'Email Address' (admin@gmail.com) and 'Password' (*****), and a 'Login as ADMIN' button. Below the form are links for 'Forgot Password?' and 'Create New Account'.

Smart Delivery App

localhost:3000/admin

ID	Customer	Status	Assigned Driver	Action
6953e0...	Mehek 10-41	Picked Up	driver1@gmail.com	View Map
6953e5...	Subhashini 11-11	Assigned	d1@gmail.com	View Map
695b9f...	Mehekkuu 12354	Assigned	d2@gmail.com	View Map

Driver Fleet & Performance

Driver Name	Email	Vehicle	Actions
Mehek	smehekfatima@gmail.com		AI Review
Driver1	driver1@gmail.com		AI Review
d1	d1@gmail.com		AI Review
d2	d2@gmail.com		AI Review
Driver 3	d3@gmail.com		AI Review

Smart Delivery App

localhost:3000/analytics

d2 (d2@gmail.com)

Completed
0

Earned
₹ 0

Pending
1

Volume Trends

Today This Week This Month This Month

This Month orders : 4

Status

Completed Pending

Search 21:46:19 07-01-2026

The screenshot shows the 'Enterprise Analytics' section of the Smart Delivery App. It displays four key metrics: Total Revenue (₹ 0), Total Orders (4), Active Fleet (5), and Pending Jobs (4). Below these, the 'Individual Driver Performance' section shows data for driver d2 (d2@gmail.com): Completed (0) with a green background, Earned (₹ 0) with a yellow background, and Pending (1) with a light blue background. At the bottom, there are sections for 'Volume Trends' and 'Status'.

The screenshot shows the 'Driver Console' for Driver 3. It displays an assigned order (Order #695e87, Customer: Mehek) with a value of ₹78.00192964445799. A 'New Job Opportunity' notification is shown, indicating a pickup at 17:00. The driver has two options: 'Reject' (red button) or 'Accept Job' (green button).

7. Challenges Faced

- Implementing secure **role-based routing** for Admin and Driver users
- Managing **authentication tokens** and maintaining user sessions
- Ensuring **protected routes** to prevent unauthorized access
- Integrating frontend components with **backend REST APIs**
- Handling asynchronous data fetching and error scenarios
- Designing dashboards that are both **user-friendly and responsive**
- Debugging UI issues and improving navigation flow

8. Learnings & Skills Acquired

- Hands-on experience with **React.js frontend development**
- Implementation of **login, registration, and role-based authentication**
- Understanding of **JWT handling** and session management
- Experience with **protected routes and access control**
- Integration of frontend with **backend APIs**
- Improved skills in **UI/UX design** and responsiveness
- Debugging, testing, and refining frontend applications

9. Testimonials from team

Team Member 1:

“The contributor effectively handled frontend development and implemented secure user role authentication, enabling smooth login and role-based navigation.”

Team Member 2:

“The contributor designed responsive and user-friendly interfaces that improved the overall usability of the dashboards.”

Team Member 3:

“The contributor ensured proper role-based routing and integrated frontend components with backend APIs for controlled access.”

Team Member 4:

“The contributor demonstrated strong problem-solving skills while implementing protected routes and refining frontend workflows.”

Team Member 5:

“The contributor’s work on frontend development and authentication significantly enhanced the security and user experience of the application.”

10. Conclusion

In conclusion, my contribution to the TrackMile project primarily focused on frontend development and user role authentication. I successfully implemented secure login and registration functionality, role-based access control, and protected routing to ensure that users could access only authorized sections of the application. This project helped me gain practical exposure to real-world frontend development challenges and strengthened my understanding of secure web application design.

11. Acknowledgements

I would like to express my sincere gratitude to **Infosys Springboard** for providing the opportunity to participate in this virtual internship program. I am especially thankful to my **mentor** for the continuous guidance, encouragement, and valuable feedback provided throughout the internship, which played a crucial role in shaping my understanding and successful completion of the project. I also extend my heartfelt appreciation to my **teammates** for their constant support, collaboration, and cooperation, which greatly contributed to the smooth execution and overall success of this project.

Finally, I appreciate everyone who contributed directly or indirectly to my learning and the completion of this project.