

Project Report

Core Features & Contributions

1. User Authentication & Role Management

- Implemented secure login functionality.
- Defined roles for **Admin**, **User**, and **Delivery Agents** to ensure role-based access control.

2. Dashboard Development

- Built interactive dashboards for:
 - **Admin**: Oversight of platform operations.
 - **Users**: Seamless engagement and order tracking.
 - **Delivery Agents**: Efficient task management.

3. Database Design & Architecture

- Designed **ER diagrams** and **Entity-Relationship models** for a structured and efficient database.
- Ensured data integrity and optimized database queries.

4. API Development & Testing

- Developed robust **Python-based APIs** for seamless communication between frontend and backend.
- Conducted **Postman testing** and implemented **unit testing** to ensure reliability and performance.

5. Route Optimization

- Engineered efficient routing strategies to enhance delivery operations and minimize delays.

6. Data Visualization

- Utilized tools like **Chart.js**, **Plotly**, **Matplotlib**, and **Seaborn** to generate insightful reports and analytics, including:
 - Sales trends.
 - Customer purchase demographics.
 - Feedback analysis.
 - Identification of top-selling items.

7. Machine Learning Integration

- Developed and integrated ML models for:

- **Anomaly Detection:** Identifying irregularities in operations.
 - **Sentiment Analysis:** Analyzing customer feedback.
 - **Customer Prediction:** Predicting food choices and preferences.
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Key Achievements

- Successfully led the team from **concept to execution** of the project.
 - Delivered a fully functional, scalable, and feature-rich platform.
 - Gained hands-on experience in **frontend, backend, testing, and database frameworks**.
 - Enhanced problem-solving, leadership, and technical skills.
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Technical Stack

- **Frontend:** HTML, CSS, JavaScript, Chart.js, Plotly
 - **Backend:** Python, Flask/Django
 - **Database:** MySQL, SQLite
 - **Testing:** Postman, Unit Testing
 - **Data Visualization:** Matplotlib, Seaborn
 - **Machine Learning:** Scikit-learn, Pandas, NumPy
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Takeaways

- Strengthened expertise in **Full Stack Development** and **Agile Methodology**.
 - Gained practical experience in **team leadership** and **project management**.
 - Developed a deeper understanding of **data-driven decision-making** and **machine learning integration**.
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Key Takeaways

- **Leadership:** Gained hands-on experience in team leadership and project management.
- **Technical Expertise:** Strengthened skills in full-stack development, database design, and API testing.
- **Data-Driven Decision Making:** Developed a deeper understanding of data visualization and machine learning integration.
- **Scalability & Performance:** Delivered a fully functional, scalable, and feature-rich food delivery platform.

Core Functionalities of Project:



Welcome ADMIN!
Rishav Basu

Reports

Admin Notifications

Sales Insights

Customer Insights

Menu Management

Order Management

Unassigned Orders

Performance Metrics

Orders Overview


Delivery Agents

Reported Issues

Logout

Order #16484 Details

Ordered Items




Chocolate Cake

Extra: Warm chocolate cake with a gooey center

Rs 80 X 1

Rs 80.0



Caesar Salad

Extra: Romaine lettuce with Caesar dressing and croutons

Rs 100 X 1

Rs 100.0

Order Fee

Subtotal:

Rs. 180.00

Tax:

Rs. 18.00

Delivery Fee:

Rs. 100.00

Total Amount:

Rs. 206.60

Order Status:

Preparing Food

Update Status

Order Tracking

Order Confirmed

Preparing Food

Out for Delivery

Delivered

Customer Details

Name:

Email:

Delivery Agent Dashboard

Home

Orders

Route

Performance

Report Issue

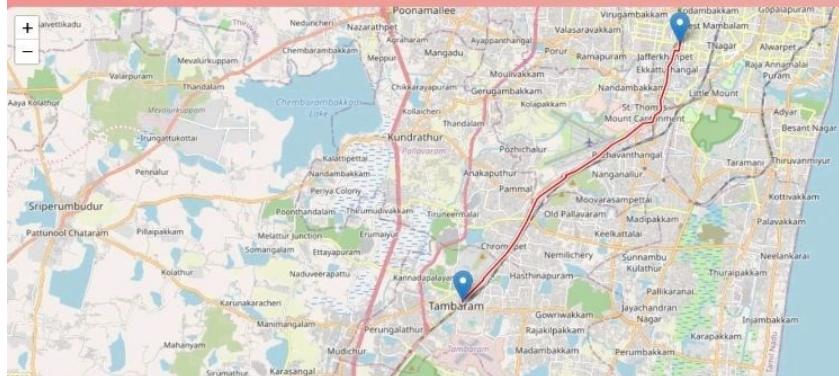
Log Out

Route Finder

Ashok pillar

Tambaram

Find Route



Grand Southern Trunk Road, Old Trunk Road

17.6 km, 24 min

Head northeast on Jawaharlal Nehru Road (100 Feet Road) (SH 12)

300 m

Make a U-turn and continue on Jawaharlal Nehru Road (100 Feet Road) (SH 12)

350 m

Continue onto Inner Ring Road (SH 12)

150 m

Keep right at the fork

100 m

Turn right

200 m

Turn left onto Inner Ring Road (SH 12)

2.5 km

Continue onto Kathipara Interchange Flyover (SH 12)

1 km

Continue onto Grand Southern Trunk Road (SH 188)

5 km

Turn left onto Thirusulam Road (D6962)

100 m

Turn right onto Old Trunk Road

4 km

Welcome ADMIN!
Rishav Basu

Reports

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Order Management

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Performance Metrics

Orders Overview


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Logout

Order #16475 Details

Ordered Items




Caesar Salad

Extra: Romaine lettuce with Caesar dressing and croutons

Rs 100 X 1

Rs 100.0




Chocolate Cake

Extra: Warm chocolate cake with a gooey center

Rs 80 X 1

Rs 80.0



Mojito

Extra: Freshly brewed and chilled black tea

Rs 50 X 1

Rs 50.0

Order Fee

Subtotal:

Rs. 236.0

Tax:

Rs. 23.0

Delivery Fee:

Rs. 100.0

Total Amount:

Rs. 262.6

Order Status:

Out for Delivery

Update Status

Order Tracking

Order Confirmed

Preparing Food

Out for Delivery

Delivered

Customer Details

Name:

Email:

Contact No:

Address:

Delivery Agent Detail

No delivery agent assigned yet.



CERTIFICATE OF COMPLETION

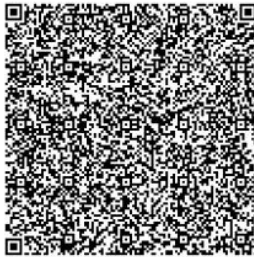
presented to

Panchadip Bhattacharjee

for actively participating and completing the mandatory assignment related to

Internship 5.0 (B3) Develop Online Food Ordering System

conducted from November 26, 2024 to January 31, 2025



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To verify, scan the QR code at <https://verify.onwingspan.com>



Thirumala Arohi
Executive Vice President and Global Head
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Portfolio Note:

This project showcases my ability to lead a team, design and develop scalable applications, and integrate advanced technologies like machine learning into full-stack solutions.

Conclusion

This internship at Infosys Springboard was a transformative experience, allowing me to lead, innovate, and contribute to a real-world project. I am excited to apply these skills to future challenges and continue growing as a Full Stack Developer.