InstantBasket Project Report

1. Introduction

InstantBasket is a location-based order management platform designed to simplify order assignments and streamline delivery operations. Using cutting-edge technologies like Sanity CMS, Clerk authentication, and Next.js 15, the project emphasizes real-time updates and block-wise management for riders.

2. Challenges Faced

1. Implementing block-wise location management required a detailed schema design in Sanity.
2. Synchronizing real-time updates for orders using Sanity webhooks demanded precise configuration.
3. Rider dashboard faced delays in fetching assigned data initially, resolved with optimized use of SWR.
4. Developing unique order IDs needed secure handling with the uuidv4 package.
5. Integrating Clerk for authentication required configuring secure routing and session handling.

3. Features Implemented

1. **Authorization:** Clerk authentication service for secure user and rider login.
2. **Block-wise Order Assignment:** Orders are automatically assigned to riders based on their assigned block.
3. **Real-time Updates:** Sanity webhooks ensure live updates on order status and rider activity.
4. **Rider Dashboard:** Provides block-specific data with the ability to update order statuses.
5. **Order Management:** Auto-generated unique order IDs using uuidv4.
6. **Admin Management:** Managed through Sanity Studio, allowing dynamic updates and schema management.
7. **Payment Integration:** Stripe integration for secure and seamless transactions.

4. Technologies Used

- **Next.js 15:** For modern frontend development with React 19.
- **Sanity CMS:** Used for content management, database storage, and webhook integration.
- **Clerk:** Authentication service for user and rider access control.
- **Stripe:** Secure payment processing for customer orders.
- **useSWR:** For efficient data fetching and state management in the frontend.

5. Conclusion

The InstantBasket project has made significant progress, overcoming various technical challenges to build a robust and scalable platform. The integration of modern tools and technologies has enabled efficient management of block-wise order assignments, real-time updates, and user authentication. Future updates will include an admin panel for enhanced control and new features for a seamless user experience.