PRANJAL

Project Overview: Development of a Water Delivery Application

As part of my internship at Dhanush Info Tech Ltd., a prominent company headquartered in Hyderabad, I led the initial development phase of a robust and user-friendly water delivery application. The project, developed entirely from scratch, was designed to meet the specific needs of various stakeholders, including owners, dealers, and customers. By employing advanced tools and methodologies, such as Android Studio and Google Firebase, our team delivered a solution tailored to streamline water delivery operations and ensure efficient system performance.

Key Contributions and Achievements:

1. **Requirement Gathering and Analysis:**

- Conducted comprehensive sessions with clients to understand their requirements and expectations.
- Performed detailed requirement and impact analysis, documenting all findings to ensure a clear and actionable project scope.

2. Prototype Development:

- Designed and developed a prototype application using Android Studio and Google Firebase.
- The prototype provided essential features such as user authentication, order placement, and product management, serving as a foundation for further enhancements.

3. Database Optimization:

- Deployed various procedures on the database server using PL/SQL, resulting in a 40% reduction in data processing time and significantly enhancing system reliability.

4. Successful Deployment:

- Delivered the prototype to Dhanush Info Tech for subsequent development stages, ensuring seamless transition and scalability.

Application Features and Functionalities:

1. User Roles:

Owner:

- Login credentials: Email: pranjalowner123@gmail.com, Password: 123456.(Example)
- Features include viewing customer orders, dealer orders, adding products, and managing inventory.

Dealer:

- Login credentials: Email: ranadheer@gmail.com, Password: 123456.(Example)
- Features include managing profile, adding shop locations, updating stock, accepting orders, and placing orders with manufacturers.

Customer:

- Login credentials: Email: customer786@gmail.com, Password: 123456.(Example)
- Features include browsing products, placing orders with dealers or owners, tracking orders, viewing previous orders, and managing personal profiles.

2. Workflow Highlights:

Owner Interface:

- Access to manage customer and dealer orders and add products to inventory.
- Real-time updates and notifications through Firebase integration.

Dealer Interface:

- Manage shop locations, orders, inventory, and communication with manufacturers.
- Tools for adding and updating products with intuitive navigation.

Customer Interface:

- Simple and interactive UI to browse products, place orders, and track delivery status.
- Comprehensive profiles with order history and personal information.

3. Screenshots and Navigation Descriptions:

To enhance understanding, screenshots were captured at key navigation points in the application. Below are descriptions corresponding to the screenshots:

Application Main Page: Displays three options for users: Owner, Dealer, or Customer. Depending on the selection, users are navigated to their respective login pages.
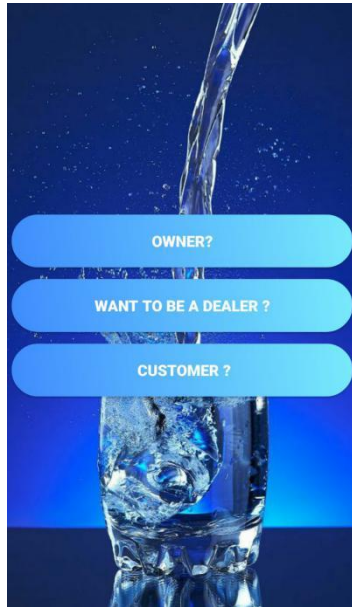
Owner Home Page: Features buttons for checking customer orders, dealer orders, and adding products. Each button navigates to a detailed view or action page, such as order management or inventory updates.

Dealer Home Page: Includes options like profile management, adding shop locations, updating stock, and placing orders with manufacturers. The intuitive layout ensures dealers can manage operations seamlessly.
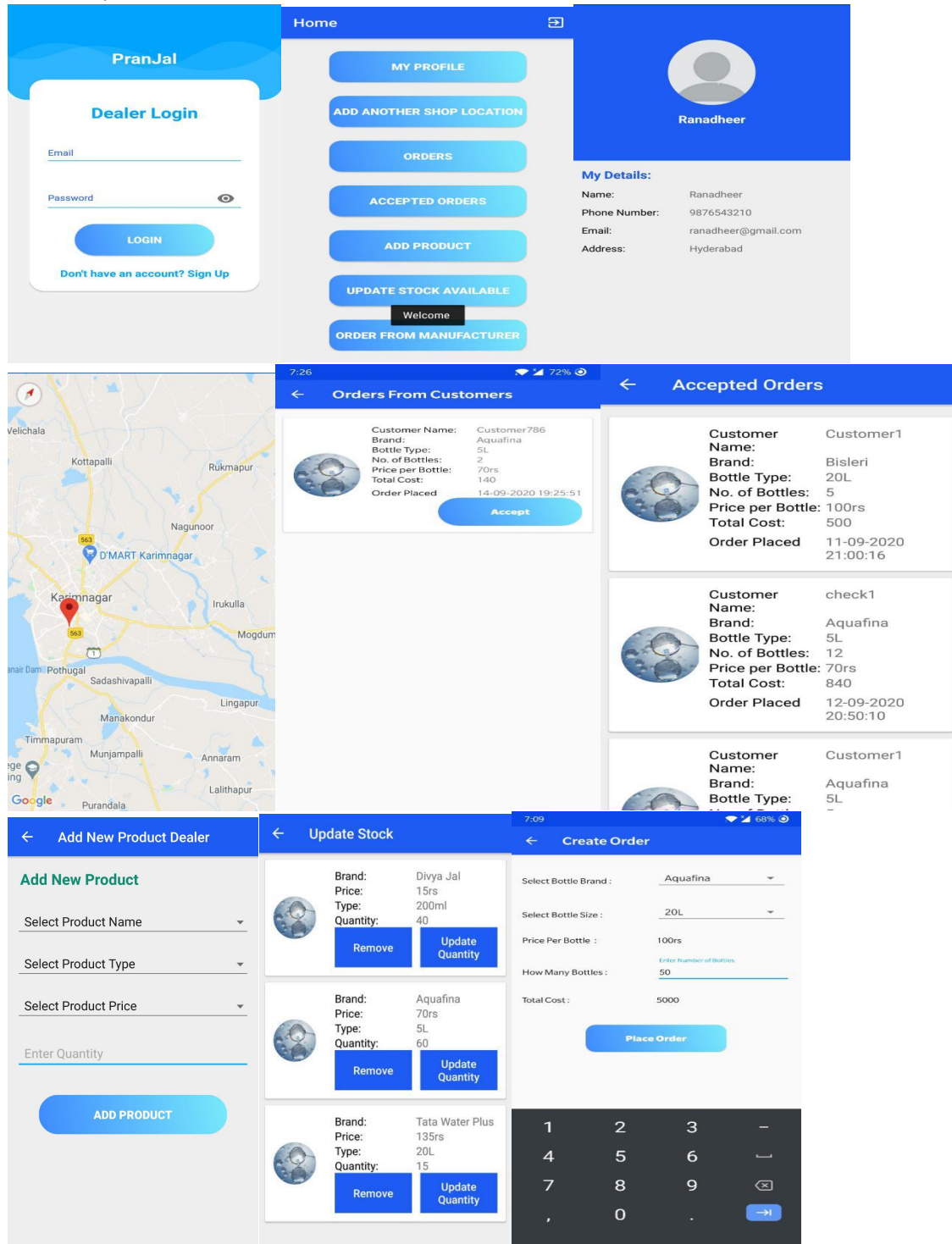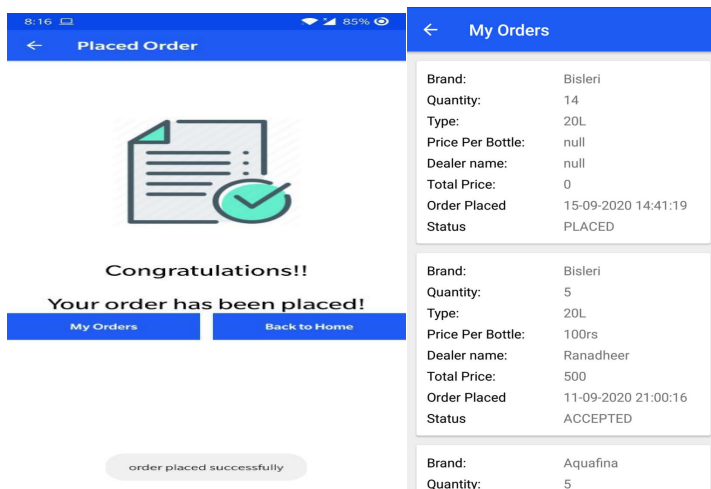
Customer Home Page: Customers can browse products, view dealers, and place orders. Additional features include tracking orders and accessing order history.
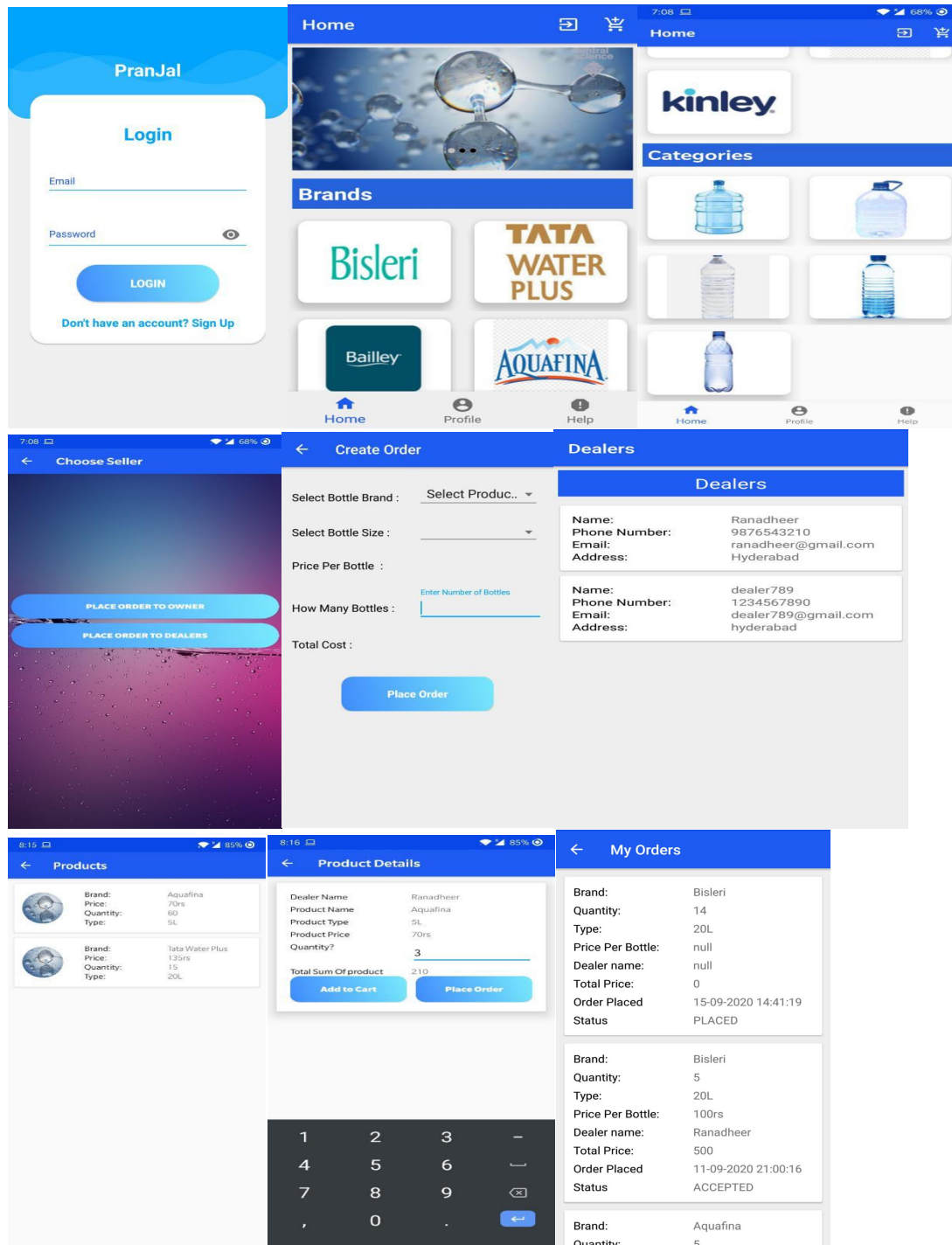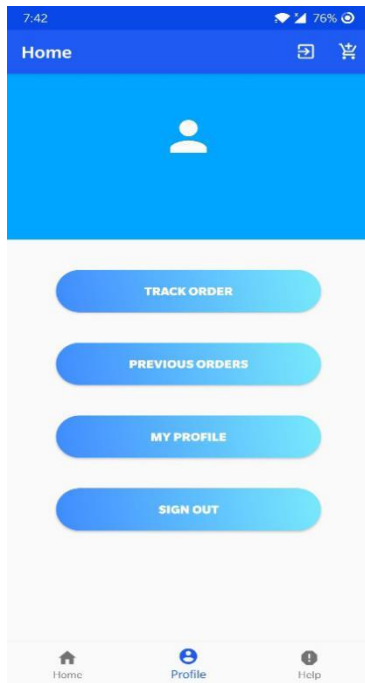
Order Placement Pages: Detailed screens show product selection options, including brand, size, and quantity. Confirmation messages acknowledge successful actions.

The screenshots illustrate the streamlined and user-friendly interface, highlighting key functionalities and smooth navigation.

4. Technology Stack:

Frontend: Android Studio for application design and user interface development.

Backend: Google Firebase for data storage and retrieval.

Database Procedures: PL/SQL for optimized query processing.

5. Impact and Scalability:

- Achieved significant improvements in data processing efficiency and user experience.
- The modular design facilitated easy customization and scalability for future enhancements.
- This project not only enhanced my technical skills but also provided invaluable experience in collaborative development, problem-solving, and stakeholder communication. The water delivery application serves as a testament to our team's dedication and innovative approach, addressing real-world challenges with cutting-edge solutions.