Design of Parcel Delivery System

March 26, 2023

1 Design

1.1 Actors

- Driver
- Recipient

1.2 Business Requirements

- Place orders
- Real-time tracking
- Driver management
- Route optimization
- Payment processing
- Feedback and ratings
- Security and privacy

1.3 Functional Requirements

- **FR 1**: Register User
- **FR 2**: Login User
- **FR 3**: Take Order
- **FR 4**: Place Order
- **FR 5**: Deliver Order
- **FR 6**: Provide Feedback
- **FR 7**: View All Feedbacks

1.4 Non-Functional Requirements

- **FR 1**: Stability: System version should be stable and bugs free.
- **FR 2**: Availability: System should be Cross Platform and available on all platforms.
- **FR 3**: Security: System should have secure payment gateway. Security should be the main priority to avoid any system breaches and to avoid any data loss.
- **FR 4**: Scalability: System should have the ability to handle growth, especially in handling more users and evolving concurrently with the business needs.
- **FR 5**: Relaibility: Probability of Failure should be less.
- **FR 6**: Usability: Easy to use and user-friendly interface • NFR7: Maintainability: System should be maintainable. If
- **FR 7**: Maintainability: System should be maintainable. If business want some new features in the system, those changes must not affect the reliability and quality of the system.

1.5 Use Case Diagram

UseCase Diagram for parcel delivery system is shown in Figure 1.

1.6 Swimlane Diagram

Swimlane Diagrams for parcel delivery system is shown in fugure 2 and 3.

1.7 Class Diagram

Class Diagram for parcel delivery system is shown in figure 4.

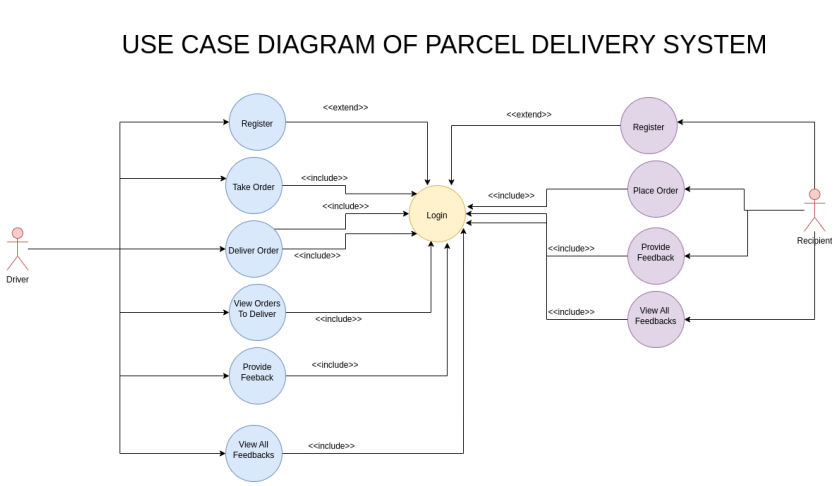

Figure 1: UseCase Diagram

SWIMLANE DIAGRAM 2: Driver

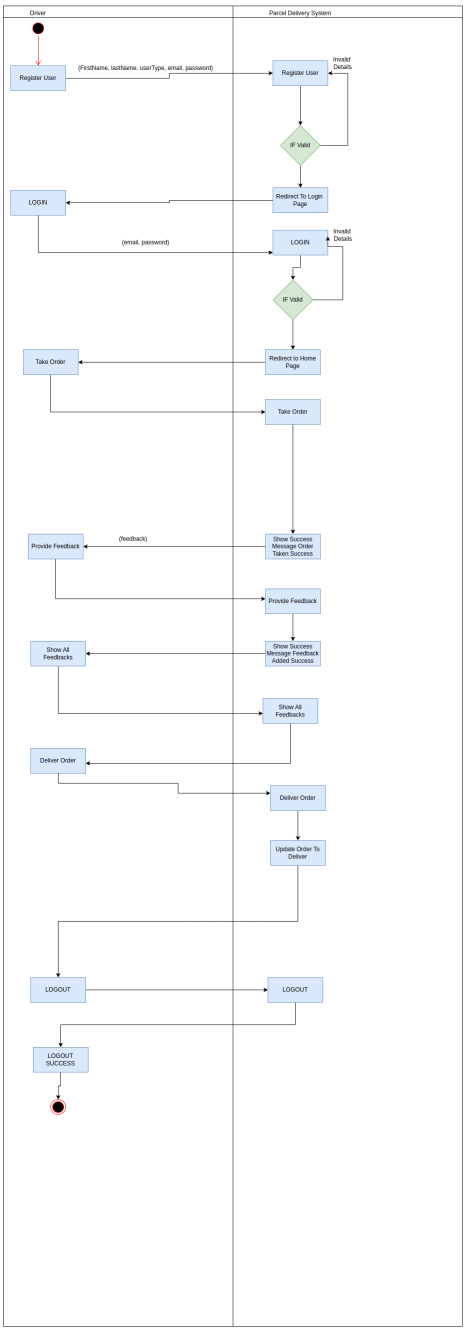

Figure 2: Swimlane Diagram 1

SWIMLANE DIAGRAM 1: Recipient

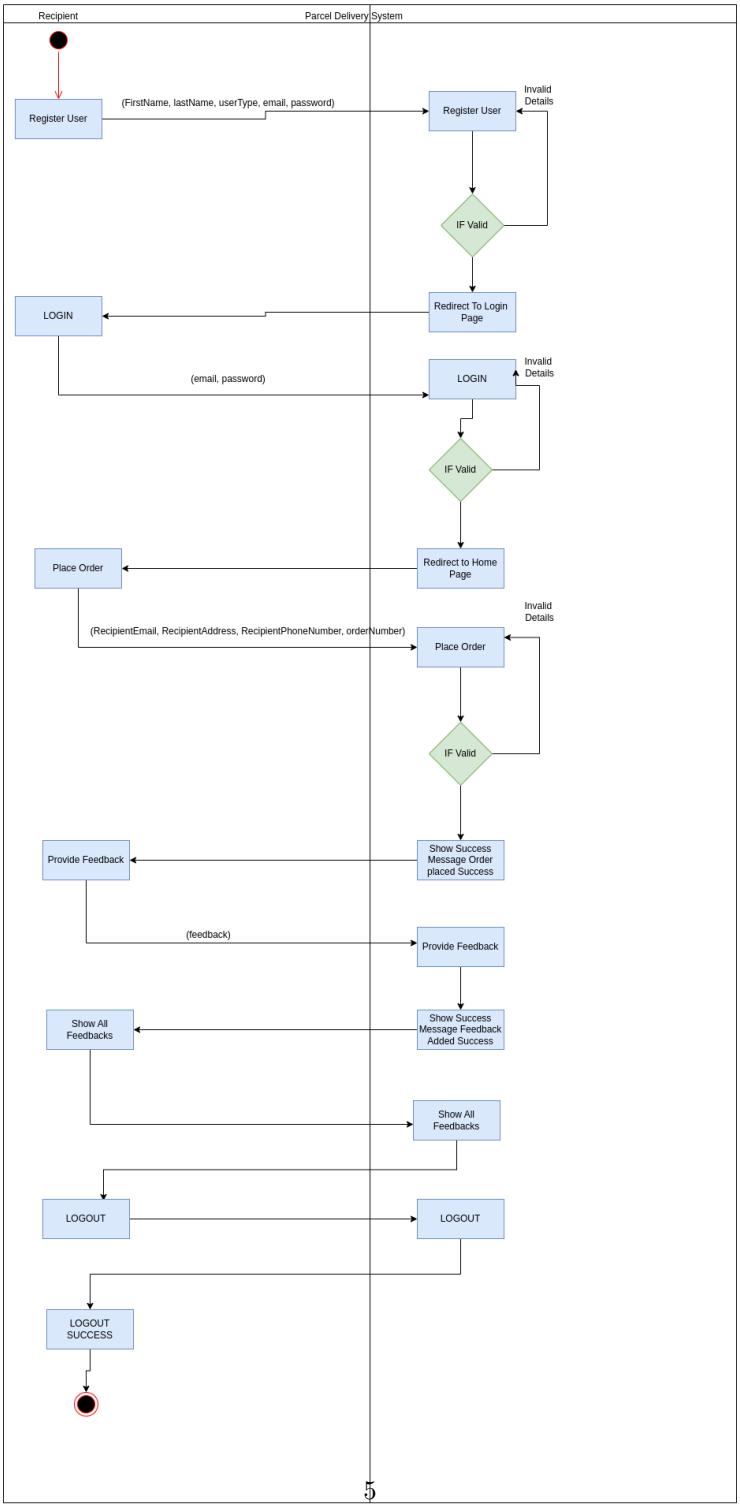

Figure 3: Swimlane Diagram 2

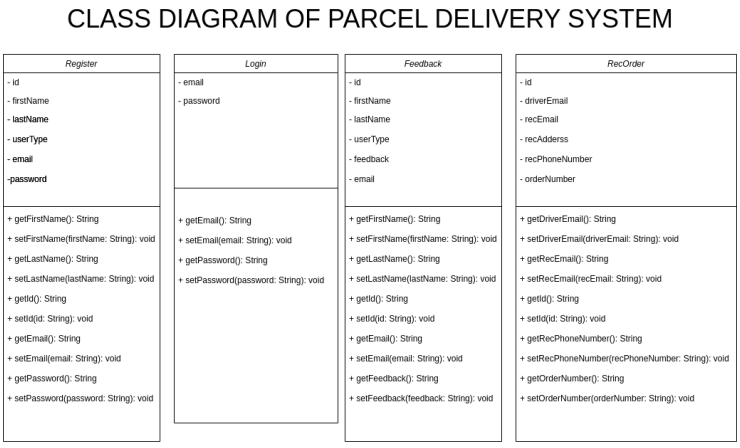

Figure 4: Class Diagram