

## Backlog

### 1. Flights Service

- Implement Create Flight feature using Command Pattern
- Implement Update Flight feature using Command Pattern
- Implement Delete Flight feature using Command Pattern
- Implement Undo/Redo functionality for Create/Update/Delete flights
- Implement simple queries (list all flights) using Query Object Pattern
- Implement detailed flight queries using Query Object Pattern
- Sync flight data between PostgreSQL and Elasticsearch with Signal (Observer Pattern)
- Implement indexing of flight data in Elasticsearch

### 2. Flights Filter Service

- Implement advanced search filters in Elasticsearch for flights

### 3. Train Service

- Implement Create Train feature using Command Pattern
- Implement Update Train feature using Command Pattern
- Implement Delete Train feature using Command Pattern
- Implement Undo/Redo functionality for Create/Update/Delete trains
- Implement simple queries (list all trains) using Query Object Pattern
- Implement detailed train queries using Query Object Pattern
- Sync train data between PostgreSQL and Elasticsearch with Signal (Observer Pattern)
- Implement indexing of train data in Elasticsearch

### 4. Trains Filter Service

- Implement advanced search filters in Elasticsearch for Trains

### 5. Profiles Mirco Service

- Implement Create Profile feature using Service Layer Pattern
- Implement Update Profile feature using Service Layer Pattern
- Implement Delete Profile feature using Service Layer Pattern
- Implement simple queries (list all profiles)
- Implement detailed profile queries

### 6. Authentication & Authorization Micro Service

- Implement user signup
- Implement user login
- Implement password change feature
- Implement Role-Based Access Control (RBAC)
- Implement dynamic permission management

### 7. Wallet Service

- Implement Create Wallet feature for users by User National Code
- Implement Update Wallet feature
- Save wallet transaction history
- Wallet Credit by gRPC and Observer Pattern communicate with Payment Gateway Service
- Wallet Debit by gRPC and Observer Pattern communicate with Refund Service

### 8. Payment Gateway Service

- Implement Create PaymentGateway
- Implement Update PaymentGateway
- Implement Simple Queries on PaymentGateway Model
- Implement Communicate with Wallet Service by gRPC with Observer Pattern
- Implement Communicate with Reservation Service by gRPC with Observer Pattern

#### 9. Refund Service

- Implement Create Refund request feature
- Implement Update Refund request feature

#### 10. Reservation Service

- Implement hotel reservation in two steps (operator-based)
- Implement reservation of flights, tours, and trains with Kafka event producer
- Implement conditions for triggering reservations

#### 11. Notification Service

- Implement event-driven notification system
- Create notification queues and listeners

#### 12. Hotel Service

- Implement Create Hotel feature
- Implement Update Hotel feature
- Implement Delete Hotel feature
- Implement simple queries (list all hotels)
- Implement detailed hotel queries
- Sync hotel data between PostgreSQL and Elasticsearch
- Implement indexing of hotel data in Elasticsearch

#### 13. Hotel Search Service

- Implement advanced search filters in Elasticsearch for hotels

#### 14. Hotel Reviews Service

- Implement Create Hotel Review feature
- Implement Update Hotel Review feature
- Implement Delete Hotel Review feature
- Implement advanced queries for hotel reviews