# Telegram Food Ordering Bot – Analysis Document

This project is a Telegram-based food ordering system implemented using Java 17, Spring Boot, and MySQL. The main goal of the project is to allow users to place food orders through a Telegram Bot without the need for a web or mobile user interface.

Project Objectives:

1. Provide a simple food ordering experience via Telegram
2. Allow users to select food items and enter quantity
3. Enable order confirmation or cancellation
4. Store and manage orders in a relational database
5. Provide admin APIs for managing foods and viewing orders

System Architecture:

1. Bot Layer: Handles Telegram updates and user interactions
2. Service Layer: Contains business logic such as order creation and validation
3. Repository Layer: Manages database operations using Spring Data JPA
4. Admin API: Provides REST endpoints for administrative operations

Order Flow:

1. User sends /start command
2. Bot displays available food items
3. User selects a food item
4. User enters quantity
5. Bot shows order summary
6. User confirms or cancels the order

Technologies Used:

1. Java 17
2. Spring Boot 3
3. Spring Data JPA
4. MySQL
5. Telegram Bots API (Long Polling)

The project is designed with extensibility in mind and can be enhanced in the future by adding features such as online payment integration, reporting dashboards, and advanced user management.