**Online Pizza Ordering System:**

**Members:**

1. Muhammad Sannan Umer (cs221119)
2. Pawan Kumar (cs221152)
3. Somil Raj (cs221140)
4. Raza Ali (cs221136)

**Aim:**

Our project aims to create a user-friendly online pizza ordering system that facilitates customers in viewing the menu, selecting pizzas, and placing orders for home delivery. The system ensures a seamless experience by incorporating the following features:

**View Menu:** Customers can easily browse through the menu card to explore various pizza options.

**Place Order:** Once the desired pizzas are selected, customers can proceed to place their orders for home delivery.

**Enter Personal Details and Delivery Location:** During the ordering process, customers are required to enter their personal details along with the delivery location.

**Automatic Retrieval of Registered Customer Details:** If a customer's mobile number is already registered with the shop, their details are automatically fetched, providing convenience. Customers have the option to use the registered address or enter a new one.

**Shortest Path Calculation:** The system calculates the shortest path to the customer’s location and saves this distance for efficient delivery planning.

**Estimated Delivery Time and Charges:** Based on the shortest distance, the system calculates the estimated delivery time and charges, which are then displayed to the customer.

**Total Bill Amount Calculation:** Delivery charges are added to the cost of ordered pizzas, and the total bill amount is dynamically generated and displayed to the customer.

**Order Confirmation and Payment:** Customers have the option to confirm their orders and proceed with payment or cancel the current order if needed.

**Programming Language:** Java

**Data Structures:** Graph, Hashmap, Set, ArrayList

**Algorithms used:** Dijkstra's Shortest Path Algorithm