

## II. Restaurant

### General Requirements.

Implement an app for managing orders in a restaurant from the perspective of a server.

- Assign tables to a server.
- Input orders for each person at a table.
- The app should include menu items, organized by different categories, such as entrees, drinks, desserts, etc. Costs should also be included.
- Some menu items may allow for modifications, and that should be implemented.
- Should include functionality for calculating:
  - the bill
  - splitting the bill
    - by evenly splitting it between all the people at the table
    - by individual orders
- Closing an order when the bill is paid – closed orders should still be maintained
- When a bill is paid, customers have the option of adding a tip and a server's tips should be tracked throughout their shift
- Implement functionality for managing multiple servers.
- Implement functionality for tracking sales of specific menu items.
  - Sort sales based on most frequently ordered items.
  - Sort sales based on the total amount of money made from a specific item – i.e. the cost per item \* the number of items sold
- Determine the server who earned the most from tips.

### Ideas to Increase Complexity:

- Implement a high-quality GUI using the OBSERVER pattern.
- Add additional functionality to the backend.
- Do more data analysis from the perspective of the restaurant owner – e.g. # of people, busiest times, etc.