Customer has a restaurant. It has 16 tables. Each table has 4 chairs. 1-4 people per table.

4 sections of 4 tables each. 1 waitstaff assigned to each section. Hoping to change to 1 per 2 sections. Able to notify managers for backup, if needed.

Decide on how many devices per table. 1 device can set the order for the whole table. Able to split the bill. Able to split an item on the bill. Be able to accept and calculate tips (10%, 15%, 20%, or custom) and compute tax (use a fixed tax). After they pay, play a game for a 1/5 chance to get a coupon for a free appetizer/dessert (Once per order).

2 buttons are always visible –Customer can call for help at anytime or ask for a drink refill (only soft drinks or water, no alcohol and free refills).

After they place their order, can have at least 2 different games (Maybe tic-tac-toe and trivia) (Maybe remove drink refill button and help button while games are being played).

Every table has a number.

Menu has different sections: appetizers, entrees, drinks, kid’s meals, and desserts (3+ items for each category). Be able to browse menu, add to cart, place order, and pay for it whenever they are ready. Be able to add comments in the order window, before it is placed (Send it to the kitchen staff) (Maybe have a different sections for allergies and the comments, but not necessary to have 2 different sections). Waitstaff can monitor payment status for each table. (For credit card, just make sure it has the same number of numbers) (For cash, the waitstaff has to pay it out, and maybe calculate change after). Manager can comp items.

Each waitstaff has a device, the kitchen has one, and the manager has one device.

POSSIBLE NEW FEATUE 10% - Manager can check the comped meals.

Nutritional info, just don’t show the calories on the main page.

Desserts: tres leches, cheesecake, cream cheese ice-cream.

Manager wants to know how much money they made (gross money), tips

# Functional Requirement

* The system shall differentiate between customer and staff users.
  + The system will have a separate section for customers.
  + The system will have a separate section for waitstaff.
  + The system will have a separate section for kitchen staff.
  + The system will have a separate section for managers.
* The system shall allow managers to be able to assign devices to tables.
* The system shall allow the manager to update staff information.
* The system shall allow the manager to update menu items.
* The system shall allow customers to ask for specific refills.
* The system shall allow customers to ask for help from the waitstaff.
* The system shall allow customers to play games after the order is placed.
* The system shall allow customers to view items from the menu.
  + The food menu will contain at least 3 appetizers.
  + The food menu will contain at least 3 entrees.
  + The food menu will contain at least 3 kids’ entrees.
  + The food menu will contain at least 3 drinks.
  + The food menu will contain at least 3 desserts.
  + The food menu will contain individual prices.
  + The food menu will contain pictures for all menu items.
  + The food menu will contain a description for all menu items.
  + In the food menu, the customers can add food items to the cart.
  + In the food menu, the customers can go to the cart.
  + In the food menu, the customers can go back to the customer home page.
* The system will allow customers to view their cart.
  + The cart will show all the customer added items.
  + The cart will show the price of each item.
  + The cart will show the total cost of the bill.
  + In the cart, the customer will be able to go to the menu.
  + In the cart, the customer will be able to remove items.
  + In the cart, the customer will be able to add comments to the order.
  + In the cart, the customer will be able to submit the order.
  + In the cart, the customer will be able to see the status of order submission.
  + In the cart, the customer will be able to go back to the home page.
* The system will allow customers to view their order status.
  + In the order status window, customers will be able to go back to the home page.
* The system will allow users to play 2 games.
  + While playing the game, customers will be able to exit the game at any time.
  + While in the games window, customers will be able to go back to the home page.
* The system will allow customers to checkout.
  + Customers will have the ability to pay with cash.
  + Customers will have the ability to pay with card.
  + Customers will have the ability to apply a coupon.
  + Customers will have the ability to specify a tip to pay.
  + Customers will have the ability to split the cost of the bill.
  + The system will display suggested tip amounts.
  + The system will allow a manager to comp a bill.
  + After paying the bill, the customer will have a 0.2 chance to win a coupon for a free appetizer or dessert.
  + After paying the bill, the customer can choose to print a receipt or have the receipt sent to an email.
  + If the customer wins a coupon, a coupon code will be displayed.
* The system will allow customers to request a refill for their drinks.
  + The system will send a notification to the waitstaff to provide the specified drink refill.
* The system will allow customers to request help from the waitstaff.
  + The system will send a notification to the waitstaff to provide help to the customer.
* The system will allow waitstaff to see information concerning customer orders.
  + The system will show a notification if a customer requests a refill or help.
  + The system will allow the waitstaff to view the status of customers’ orders.
  + The system will allow the waitstaff to monitor payment status.
* The system will allow kitchen staff to interact with the customer placed orders.
  + The kitchen staff will have the ability to view the sent orders.
  + The kitchen staff will have the ability to update the status of the order.
* The system will allow managers to access store information.
  + The system will show the number of sales of each item.
  + The system will allow the manager to distribute tips among the waitstaff.
  + The system will allow managers to edit the number of items in stock.
  + The system will allow managers to edit employee information.
  + The system will allow managers to change permissions for employees.
* The system will allow managers to edit the menu.
  + The system will allow managers to change menu item prices.
  + The system will allow managers to change menu item names.
  + The system will allow managers to change menu item descriptions.
* The system will have categorical permissions.
  + The system will allow customers to access only the customer section.
  + The system will allow waitstaff to access only the waitstaff section.
  + The system will allow kitchen staff to access only the kitchen staff section.
  + The system will allow managers to access the manager and waitstaff section.

# Non-functional Requirements

* The system shall run on Android Lollipop+, with API version 21+.
* The system shall use a graphical user interface.
* The system shall function while connected to the internet.

# Glossary

**Android:** A operating system that devices run on. An android device could be a tablet personal computer, smartphone, or any type of mobile device.

**Cart:** A list of the items added from the menu.

**Checkout:** A process that allows the user to pay for their order.

**Comment:** Additional information about the user’s order that they want the restaurant staff to be aware of.

**Coupon:** A discount applied during checkout to give a benefit to the customer.

**Customer:** A person using the user side of the application. They only have access to the menu, games, checkout, and requesting the waitstaff.

**Menu:** A list of food and drink items that are available for purchase. The menu contains names, descriptions, prices, and pictures.

**Game:** A digital and interactive form of play.

**Graphical user interface:** A visual interface the incorporates visual indicators that allow the user to easily manipulate the application.

**Items:** What is available from the menu: appetizers, entrees, desserts, and drinks.

**Kitchen:** An area in the restaurant that is dedicated to the preparation of food. In this application, it is the final destination of received orders, where they are viewed and completed.

**Manager:** An employee who leads the kitchen and waitstaff. He also ensures the restaurant is running smoothly as a business.

**Order:** The entire group of items that a table has purchased.

**Page:** The location in the application where the customer, kitchen staff, wait staff, and manager can select options.

**Prices:** The dollar value associated with an item.

**Stock**: A list of the current inventory of food and drink items.

**Tips:** Extra money left by the customers, for the wait staff, to show their gratitude.

**Receipt:** A proof of purchase, provided after payment has been made.

**Wait staff:** The staff that delivers food and drinks to customers.