

Ninja Fast Kitchen System 3000

By: Louis Lu, Ethan Tuttle, John Foster, Shawn George

Description

The Ninja Fast Kitchen System 3000 is a restaurant scheduling application designed to streamline the ordering and ticketing process. With two different applications, a Restaurant application and a Customer applications, users can create menus, place orders, and see the order tickets come through as if they were running their own kitchen.

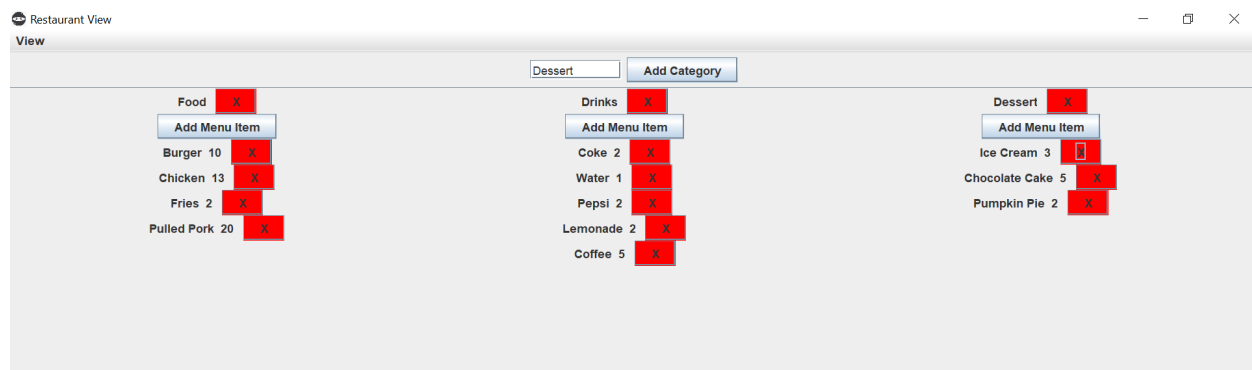
Inspiration

Amidst the emergence of COVID-19, restaurants nationwide closed en masse in an attempt to slow the spread of the pandemic. After a tough year of isolation and quarantine, restrictions began to let up and restaurants cautiously reopened following strict health guidelines. What followed were swarms of people ordering and flooding restaurants with orders for food. For family restaurants and small businesses the sudden flood of orders left them at a loss as they turned orders away or told customers they would need to wait hours for their food. Our proposal to deal with the sudden flood of orders is a Kitchen Display System that hopefully streamlines this process, and alleviates the stress of restaurant owners.

The Restaurant Application

On startup you will be shown the Title view. It contains the logo, the name Ninja Fast Kitchen System, your current IP that customers should connect to, and buttons to go to the other views. These views can also be accessed from the menu bar.

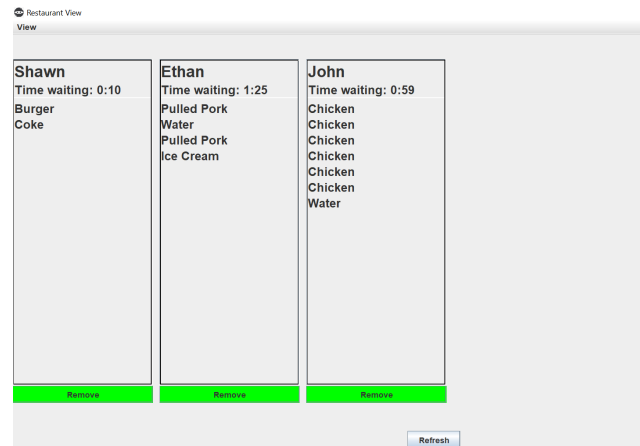
With this application, users can create a menu in the Menu Creation view. You can add categories, and in each category add items and times to make the items. Clicking on category names or item names will allow users to reconfigure their menu however they want. This information will all be presented to the Customer application later on.



Using the Active Orders Display view will allow the user to view all orders that have been currently placed. A single order is represented as a box with a black border. It contains the name of the person that ordered, the time they have been waiting, and all of the items they ordered.

Each ticket contains a remove button underneath it. Clicking that will remove the order from the queue. So if you have completed an order, that would be the button to push!

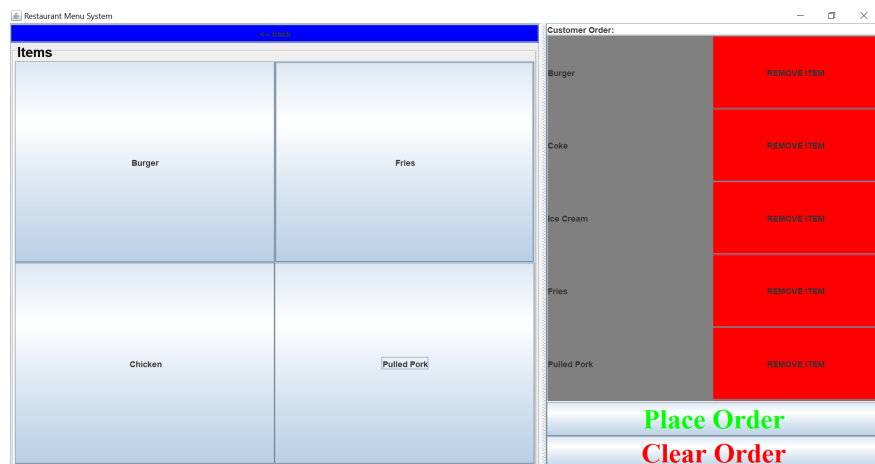
There is also a refresh button at the bottom. This should be used when swapping to the Active Orders Display view to update the page. The page will also be updated automatically when a new order comes in.



The Customer Application

On startup, you will be prompted for your user and an IP. This IP should be the IPv4 of whoever is running the Restaurant application. In an ideal world we could have our own hosting site for the IP, but for now just use the IPv4 of the machine running the Restaurant IP. This IP can be found on Title view, or by running the command *ipconfig* in the command line.

Once you enter all fields and click submit, you will be shown a display of the current menu from the Restaurant application. You can choose categories to look into, and choosing an item inside a category will add it to your order on the right hand side. Choosing Place Order sends your order to the kitchen, and Clear Order removes all items from your order. There is also a REMOVE ITEM button for each item to remove individual items from an order.



Error Messages

All error messages will have the form of a small dialog box with their error message in the center, like on the right.



Possible errors are:

- Connection Refused: Incorrect IP or IP not available
- Connection Error: Error in communicating with Restaurant application
- Must enter all inputs: not all inputs needed were entered when prompted
- Icon image not found: could not load the logo image
- Category already exists: Trying to add a category to a menu that already exists
- Menu Item already exists: Trying to add a menu item to a category that's already there
- No Items ordered: Trying to place an order when no items are picked