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INST 362

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Project 4: Prototyping Part 2: Design of Low-fidelity Wireframes

System Concept Statement

Despite there being a permanent regular menu board displaying the different menu options a customer can order, this type of menu fails to allow customization and updates to the menu, as well as display the latest deals and what the food looks like. Our role is to create and design a digital menu that shows regular menu options, deals and specials, as well as pictures of the menu items. This is to be implemented via an application, allowing users to interact with the menu via a touch screen interface. This would ideally allow users to add, modify, and/or edit menu items as they wish based on real-time restaurant inventory, while also making the menu easily modified with different items or specials.

This menu system would also allow the restaurant employees on the back-end to update menu items and prices as needed. We are focusing on creating a system that is both user-friendly for customers that are ordering and for employees updating items on the digital menu. Our prototype derives elements from the design that incorporates a digital menu ordering system.

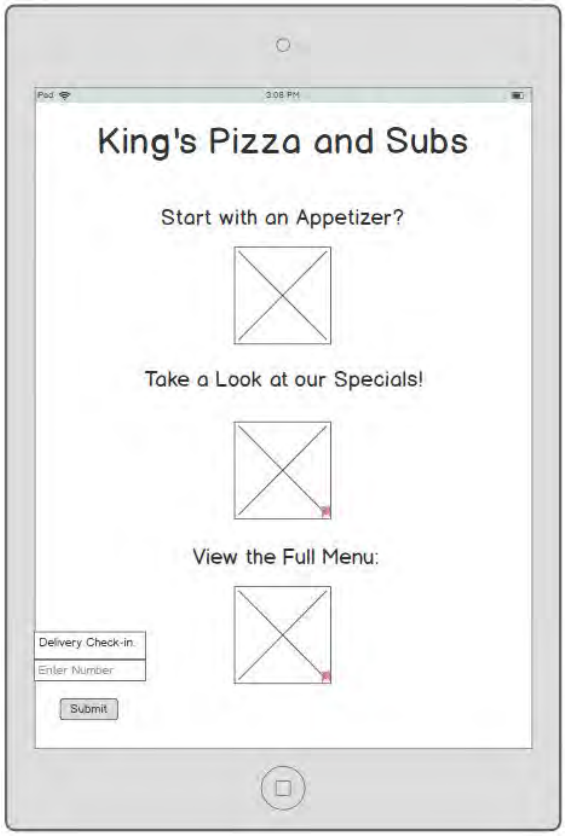
Revisions

Changes in scope: As of now, we have a wireframe that displays how the system would interact with a user ordering a food item. We haven't thought about how the system would work on the back end. The back-end features are essential because they allow the menu ordering system to fetch and change menu item prices and names when necessary. This back-end menu item input may or may not become part of our final design depending on complexity.

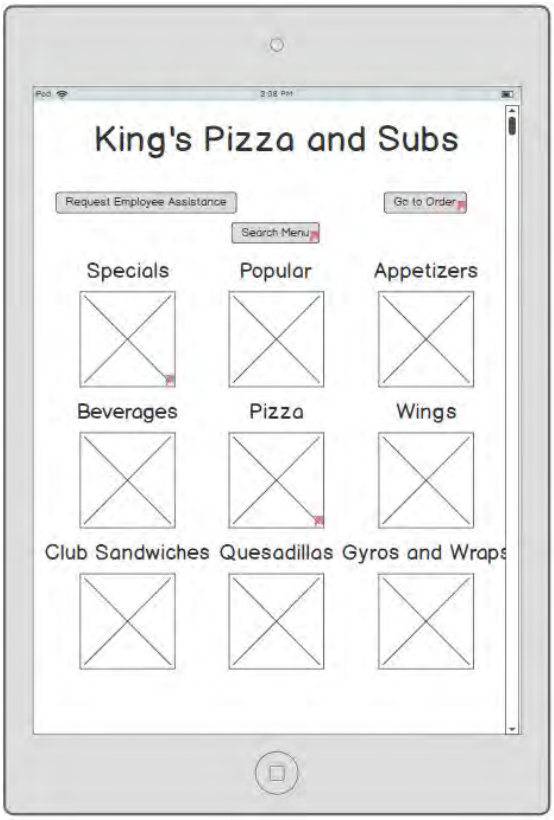
Design revisions: One thing we decided to implement and change was the specials screen. Instead of having a few random specials listed on the screen, we decided to organize them by category, including Pizza, Subs, and Other. We decided to take this step because King's Pizza's GrubHub menu incorporates a lot of special options, but there are so many that it would be information overload for a user of a menu ordering system to have them unorganized.

Button Accentuation: Some buttons were not easily found by users, specifically the add item button. An outline was placed around the button, similar to other ones, but larger. This will make the user more apparent of the button and intended function.

Wireframe Walkthrough: Our prototype models a tablet screen that a customer can use to place their order. We have 20 different screens/layers as parts of the prototype. The first screen is 3 menu options for the customer: Appetizer Menu, Specials Menu, or Full Menu. Clicking on one of these brings the user to the appropriate menu category page.

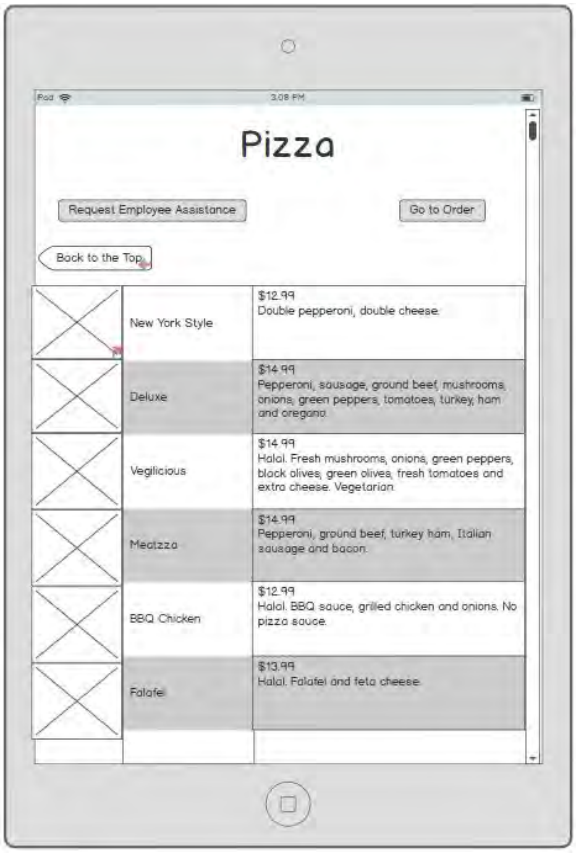


Shown is the home page, which displays a few categories the user might be interested in. It aims to grab the users attention, drawing them to areas that they can order from. There is also functionality for a food order delivery service driver to check in in order to pick up food.

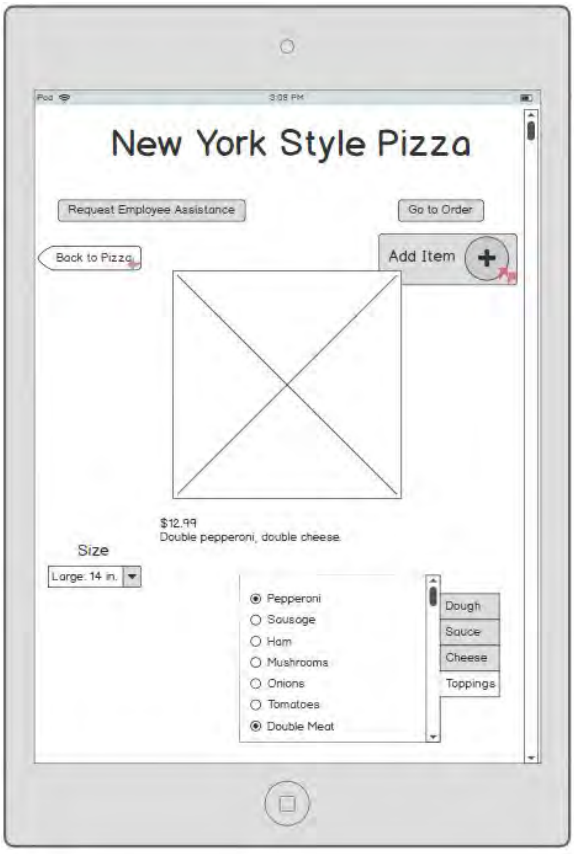


Shown above is the Full Menu category page, which displays if the user selects “View the Full Menu” on the previous screen.

The menu category page lists all of the options available for either the full menu or specials. Each category has a seperate picture to differentiate it from others to the user, so that they can choose an appealing category.



After tapping on a category, or the search menu, the user is brought to a menu item listing page, which displays all items relevant to a user. Each line is an item, with a picture, description, and price. Shown to the right is the menu item listing page for pizza.



After tapping on the picture of an item, the user is brought to the item's page to customize and order it. Depending on category, different customization options will be available. Once satisfied with the item, the user can add it to their order with the 'Add Item button'. Next is the item page for New York Style Pizza.

Once the user adds an item to their order or clicks 'Go to Order' on other pages, they are brought to the Order screen, showing the items they have added, as well as adjusted prices. From this screen in the prototype, a user is able to then edit the 4th pizza in the party pack.

This screen visualizes a user going back and adding an extra premium topping to their 4th pizza before adding the edited pie to their order.

Here, an updated version of the current order is seen with the edited pie, and the user is able to delete the New York Style Pizza from here.

In our last slide, an updated version of the order can be seen with pricing adjustments, customizations added, and specified items removed.

These screens form the backbone of our prototype, with a few variations for different categories or items to be used when testing. The full wireframe can be seen here: https://balsamiq.cloud/skkf2yw/p5p9hr0

Pilot Test: To pilot our prototype, testing was conducted by having different people try out the Balsamiq prototype as if they were ordering a pizza without any help and voicing their thoughts. They were instructed to order a New York Style Pizza, or a Party Pack Pizza Special, customizing the order with implemented ingredients. The relevant screens were given to them if they “clicked” on a certain button or category. In doing so responses were noted and it was found that the system was mostly straightforward, but some changes may be needed.

Results: The testing process was more straightforward than expected. A lot of customers easily followed the design we laid out, with a few minor changes and buttons needed to be added. Some users navigated the menu differently, depending on what they wanted to order. Also, some of the layers didn’t exist in our prototype (ex. Appetizer menu), so navigating scenarios where some layers weren’t present was challenging.

What was learned: Many users felt that the design was satisfactory, but there was some good input. A few users were confused about the layout of the full menu category screen, which can easily be changed depending on if users prefer priority or alphabetical ordering. Another requested functionality to reduce redundancy was ordering multiple of an item, which can be added under the food item screen, next to the size customization. We learned that our design always needs tweaking and with each usability test, something new was learned.