Food Delivery Service for Professionals Proposal

By: Peter Tran

In the modern workplace, many companies do not have any facilities for workers to conveniently purchase a meal to consume at the workplace. Without any options, they're sometimes forced to make do with food from a vending machine, or to physically get into their car and drive to a nearby restaurant. Although they do have the option to choose what they want to get, it does come with downsides that it can often be a very time consuming endeavor, with much of the time going towards the commute to and from the office. But what if their favorite restaurant could come directly to them at their office? This is where my web application comes into play which is designed to provide the office workers a service to deliver food right to their office without ever having to leave their desk.

There are three key user targets for my application. First are the office workers/customers who will have an interface to interact with to view nearby restaurants and their menu and add items to their cart with customizations and purchase the food. The order will be sent to my next user target, which are the restaurant owners who will have their own separate interface on their end to receive the order, prepare the food and mark that it's ready to be picked up and receive payment. Once it has been marked for pickup, it will go to the last user target which is the delivery staff. These delivery staff will have their own dashboard to find out if any restaurants are ready for pick up, which will give them then information of the addresses for pickup and delivery and also have a means to receive delivery payment and tips.

There are many benefits to implementing this web application. This application has the ability to scale out to a large area, meaning, it doesn't only have to apply to a single workplace, but can be done for many workplaces within a certain geographical region in order to process orders as efficiently as possible. There may also be company tax incentives to providing these services to their employees. Not only that but these services can boost employee morale and satisfaction in the workplace resulting in higher employee retention. Lastly, it will boost the productivity of the workers because of the minimized commute times.

Minimum Viable Product

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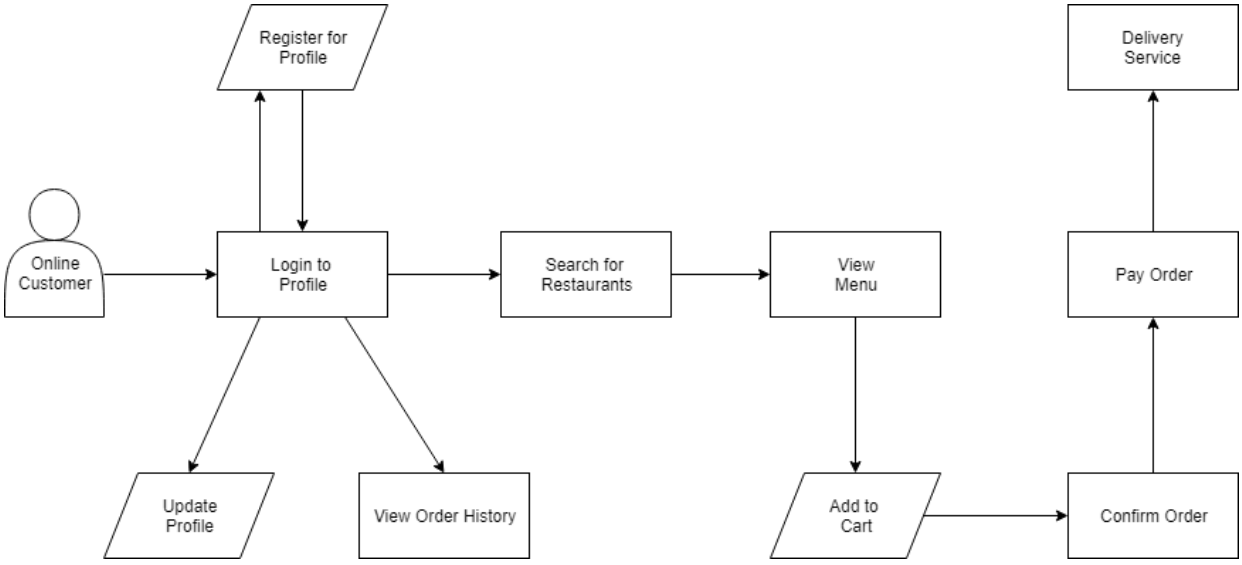
Diagram of the Users Perspective

The following diagram demonstrates the interaction between the online customer with the web application. Each item in the diagram can be viewed as a major component that is necessary to consider the web application to be complete – in other words, the minimum requirements to consider the application to be fully functioning.



Profile

A user will be able to log into their profile to view their profile details such as billing and delivery addresses, previous order history, and they will also be able to update any field such as their addresses, emails, payment methods, etc. There will be 3 variations of profiles, one for customers, one for delivery staff, and one for restaurant partners.

Register for Profile

If a customer has not registered for a profile, they will have various links that lead them to the registration page to input basic information pertaining the details for the delivery.

Search for Restaurants

A customer will be able to view the available partner restaurants they have within their area. For the minimum viable product, this will be limited to a certain geographical area.

View Restaurant Menus and Add to Cart

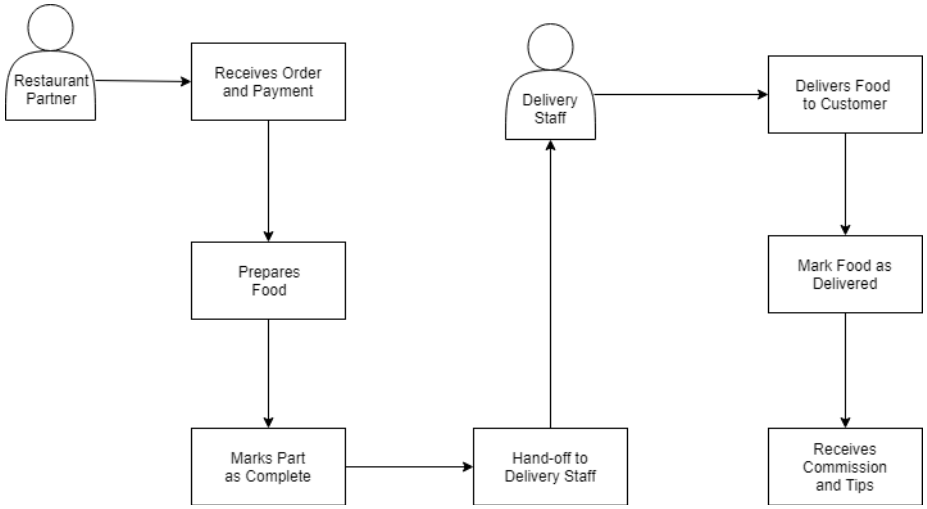
After accessing to the web application, a customer will be able to see a menu listing all the options a restaurant has for delivery which will be classified into various categories. Various sample images of the food as well as menu prices will also be available for viewing by the customer. The customers will have the ability to add items into their shopping cart as well as make personalized comments for each item for a customized product.

Shopping Cart and Order Confirmation
This section will display an itemized list of their current order and calculate the total price of the food, the service charges, and taxes. Once they have confirmed that the items in their cart is correct, they will be able to pay for their meal. They will also have the opportunity to update various addresses, payment methods, quantity, or go back to the restaurant menu to add more items.

Delivery Service
Once payment is processed, the order will be sent over to the restaurant partner to prepare the order and delivery staff will be notified of an incoming delivery. Once delivered, they will have the chance to tip their delivery staff.

Diagram of the Restaurant Partner and Delivery Staff Perspective

This following diagram demonstrates the usage between the other targeted groups, the restaurant owners/partners, and the delivery staff. Each block can be seen as a major component for the minimum viable product.



Restaurant Partner Receives Order and Payment
The restaurant partner will have a dashboard that will let the owners know if they have an order from a customer that needs to be fulfilled. They will also be given payment for the order.

Restaurant Partner Marks as Complete and Hand-off
Once the food is completed by restaurant partner, they can mark the order as completed which will notify the delivery staff to go and pick up the order for delivery. The customer will be given an update on their order for which step in the process it is in.

Delivery Staff Marks Food as Delivered and Receives Commission and Tips
The delivery staff will have their own dashboard which will tell them what needs to be picked up and the address, as well as the customer information they need to deliver the order to. Once the order has been delivered to the customer, they can mark the transaction as complete and receive payment and tips for the delivery.

High Level View of the Web Application Architecture

For my web application, I will be utilizing the Angular front end framework to interact with the back end API written with the ASP.NET framework for C#. The API will utilize a relational database to retrieve results to send over to the angular front end. The database will contain data related to the users of the applications including user profile data, addresses, transactional data, data related to the dashboards of the restaurant owners and delivery staff, menu items and prices, etc.