Human Computer Interaction

Assignment II
Preliminary Design

Food Order Website

Teammates

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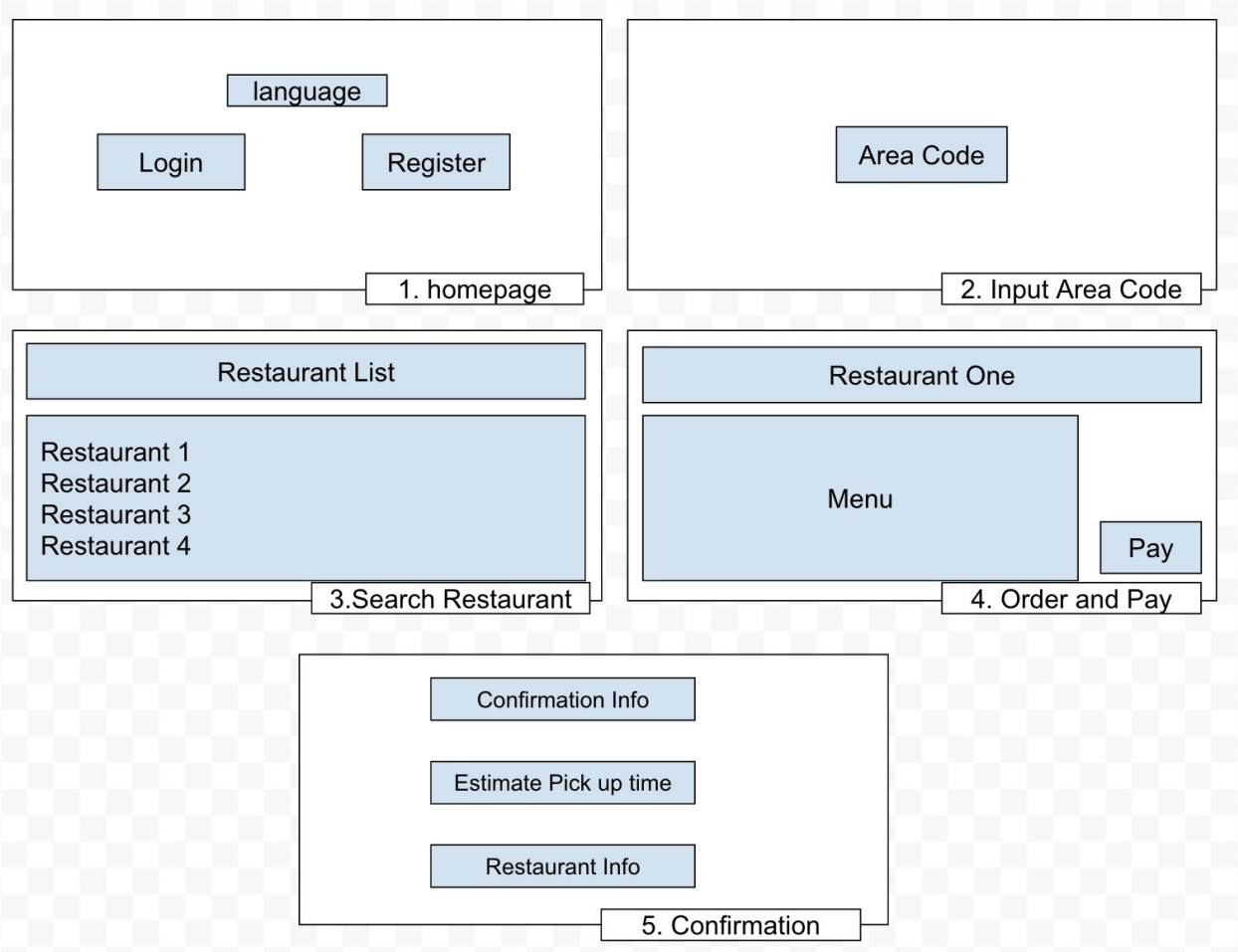
Elevator Pitch - 5 to 6 sentences

Possible Pitch I:
As young adults start spending more time at work, cooking is becoming a luxury activity. Eating out was originally the only choice until food delivery services such as ubereat came out. Uber Eats is extremely convenient in major cities such as New York and Chicago due to high population density. However, Uber Eats is unsurivorval in the majority of America because transferring food deliveries cost too high. Thus, we are launching a product that allows customers to order food pick-ups for multiple restaurants. Instead of paying 5 dollars for someone to deliver your food, you can pick-up your food on your way home.

Possible Pitch II:
You may have multiple restaurants' and cafes' apps that help your order a pick-up from them. You may have already registered accounts with multiple restaurants just to order food pick-up from them. With these many accounts, you may even have a hard time updating software or personal information with each app. We are launching a product that solves this issue by being the medium of you and all the restaurants for order pick-ups.

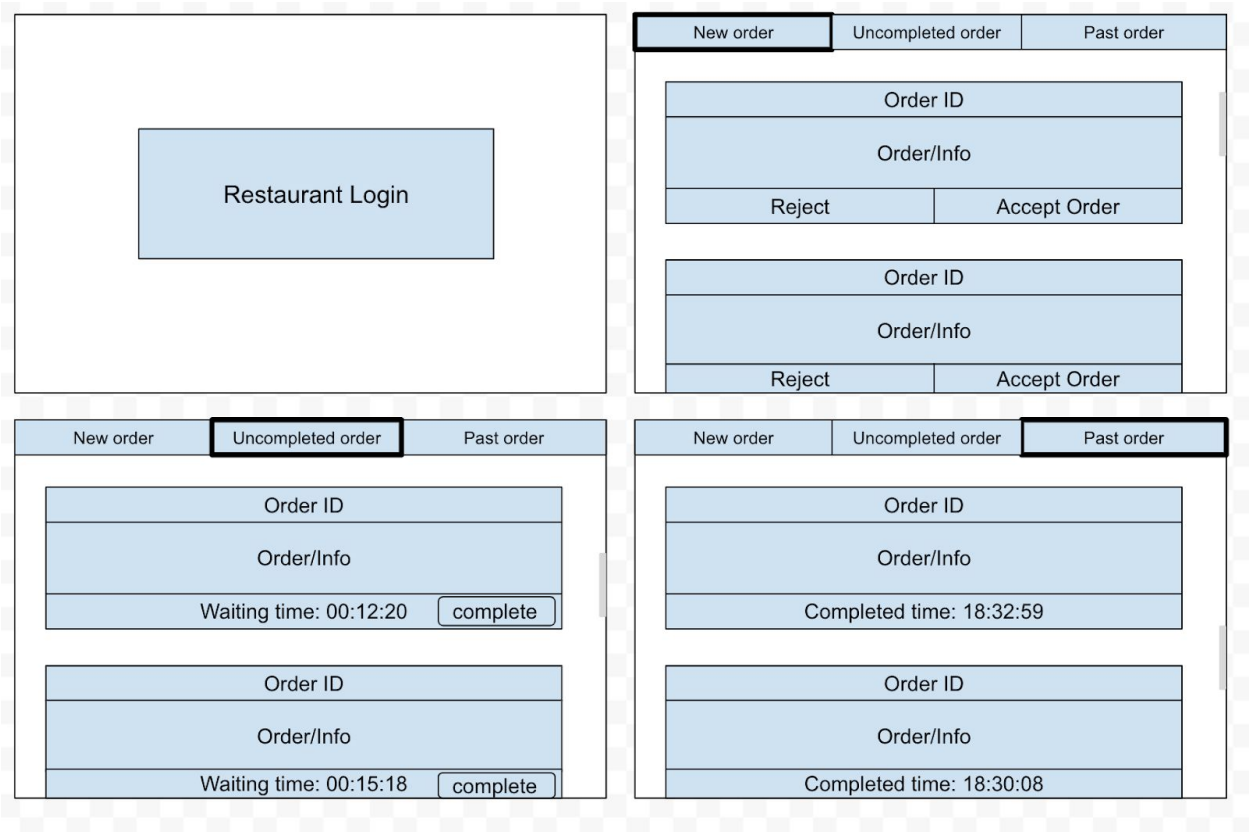
Website Description

Our idea for the web is designed to give customers a variety option of restaurants to pick to make pick-up orders. It is similar to the uber app in a way that restaurants and regular customers are going to have two different interfaces.



[Customer UI]

The picture above is a sample interface design for users. Users have the option to choose languages other than English for the interface. The homepage allows the users to login or register. Then users will need to input area code to find the restaurants nearby. In each area code, customers will have a variety of restaurants to choose from to make pick-up orders. After an order is made, the customer will receive confirmation (or reject) information about the order. The information shall provide the expected time to pick up the order or the reason why the order is denied.



[Restaurant UI]

Another interface is for the restaurants. As shown in the above figure, restaurants can login and choose among “New order”, “Uncompleted order”, and “Past order”. Restaurants can reject or accept orders. After users pick up the orders, restaurant can change the order to be completed. And restaurants could also view the past orders in case that users complain about any order.

User Analysis

For the user analysis, answer who your target audience is, where your product would be used, in what contexts, in what environments, and the frequency of the use. You may also think of other metrics you want to list--be complete and precise!

Our target audience is the Americans who have an interest in ordering food pick-ups as a replacement for using food delivery applications. Our Product has two front-end of users. One end is the individuals who want to order food pick-ups online. They will have the option to log in, register, input personal information, search restaurant, select from menus, make a payment, check the food cooking process or delivery process and receive confirmation receipt.

The other end is restaurants that put their menu, address, cooking and delivery process on our website. They will have the option to see the orders and accept the orders.

Task Analysis: *This is a breakdown of the software. For a given action (choose 3 things the application does) What does the system do, what does the user do.*

Customer UI (Refer to Customer UI diagram above)

- Login / Register
  Customers will need to register and log-in to use our service. In the foreseeable future, we can see that our database for customer table will have a phone number as primary key, name, and email.
- Find a Restaurant
  Finding a restaurant is definitely paramount to our webpage. It is very possible to have multiple restaurants with the same name but in different cities. Thus, in order to prevent customers to accidentally pay for a restaurant in a far away location, we require customers enter postal/area code first, then the restaurants in the area can be seen.
- Place an Order
  After selecting a restaurant. customers can choose what they want to order and pay for the food. Once the order is placed, the people work in the restaurant should receive the alert and they can see what the order is.
- Pay an Order
  After the users decided the order, they can choose to pay ahead. They can pay the food by debit card, credit card or PayPal.
- Order Confirmation
  After a restaurant has received an order, it will need to accept or reject the order. Then the customer will receive a confirmation notice on the app. The notice will have the information about the order and the expected time ready to be picked up.

Restaurant UI (Refer to Restaurant UI Diagram above)

- Login / Register
  Restaurant employees will need to login everyday to use our service. We do not have a register page for restaurant, because this process should not be done easily nor by automation. A restaurant may have different branch, thus, each branch of a restaurant will need to have its own login information.
- Main Page
  After logging in, restaurant employees will see alerts if receiving an order. Employee will need to accept the order or the confirmation information will not be sent to the customers.
- New Order / Uncompleted Order / Past Order
  These pages will contain information about new orders, current orders and past orders. An order in the Order Table in the database is expected to have order-id as primary key, order information, and customer phone number.

Conceptual Model

Once again, this is a repeat of what you performed in assignment 1. The expectation is that you pick key objects in your product that have attributes, relationships, actions on objects, actions on object attributes, and actions on object relationships. Have at least 4 key objects in your system.

Key Objects	● Person ● Order ● Food ● Restaurant
Object Attributes	● Name(Person) ● Account email address(Person) ● Password(Person) ● Location(Person) ● Phone number(Person) ● Saved payment info(Person) ● Name(Restaurant) ● Location(Restaurant) ● Menu(Restaurant) ● Opening hours(Restaurants) ● Spicy level(Food) ● Name of entrees(Food) ● Order time(Order) ● Deliver time(Order) ● Order status(Order) ● Order ID(Order)
Relationships	● A Person objects can order Food objects in an Order objects from a Restaurant objects. ● A person placed orders. ● Order contains restaurant and food. ● Restaurant contains food.
Actions on Objects	● Can add food to a cart(on Food). ● Can search restaurant(on Restaurant) ● Can place an order(on Order)
Actions on Object Attributes	● A person's name can be changed. ● A person's location can be changed. ● A person's password can be changed. ● A person's payment method can be edited and saved. ● A restaurant's opening hours can be changed. ● The spicy level of a food can be edited and changed. ● The kinds of food can be added or deleted.

	● Once an order is placed, order time and order ID are created as the placing time, status is created as "Waiting for confirmation". ● Once an order is confirmed by the restaurants, the order status is changed to "Preparing". ● Once an order is delivered, the order status is changed to "Delivered", the delivery time is created.
Actions on Object Relationships	● A Person objects can create Order objects. ● Orders can be reviewed or deleted in a Person's "Order History". ● Food can be added to the menu of Restaurant. ● Orders can be reviewed or deleted in a Restaurant's "Order History".

Functionality and Usage Scenarios

Functionality and usage scenarios describe how a user interacts with your system.

- Functionality Use Case 1: Placing an order for pickup
    1. Anna is an 18 year old student and she wants to place an order for pickup. She can add the food from menu page to cart and view cart.
    2. Jack is a 26 year old tech company engineer. He uses the website to see all restaurants and decide which one to order his lunch.
    3. Laura is a 54 year old manager and she wants to order Sushi for every group member for Friday team meeting so she uses the site to view what kind of food Japanese restaurants are serving and place the order.

- Functionality Use Case 2: Pay the order placed by whether a card or PayPal
    1. Allison is a college student and she does not have a credit card yet, so she can pay for her food by her debit card.
    2. Tracy is a software engineer. She has a credit card with 5% cashback, so she chooses to pay her order by credit card.
    3. Jeffery is a manager. He is very careful about everything so he doesn't want to pay by his card. He can pay the food by PayPal.

- Functionality Use Case 3: Check the process of order

  This function can check whether the food is already cooked or not and it can also provide the phone number of the delivery man to customers.

1. Cory is a football fan. He wants to have the food ready while watching the football game on TV, so he wants to check the process of the food.
2. Mary is a consultant in company. She wants her food to be ready as fast as possible, so she can check the status of the food.
3. Betty is a student. She had waited a long time for her food but she still can't see her food is ready. So she can call someone in the kitchen of the restaurant to see how the food is cooked right now.