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Project Topic

Our project topic is based on gathering insight from college-aged students on how their dietary restrictions/preferences influence the decisions that they make when finding day-to-day places to eat on and off campus. With this information, we hope to create an app that could help these same people figure out places for them to eat that are safe and provide alternatives that coincide with their restrictions/preferences. We want our app to provide efficiency, safety, and overall enjoyment to those who struggle to find suitable food due to dietary restrictions.

Design Description

Our Figma prototype can be found at:

https://www.figma.com/file/KItjhZpQSyVnTVnzn9MpGa/EatSafe?type=design&node-id=0%3A1&mode=design&t=ugfC0DzlnP5kdxGJ-1

The first task that our prototype supports is for a user to be able to navigate in the app to a certain restaurant that they search up and check if that restaurant follows any guidelines for a dietary restriction the user has. First, the user would go to the welcome page of the app after clicking the app icon. The welcome screen automatically switches to the home screen after 10 seconds or after the user clicks anywhere on the screen. After the transition, a main page populates the screen with a user profile icon in the upper right corner of the screen. Besides the user profile icon, the user can see the name of the app, a search bar, filters for types of food, and a list of the nearest restaurants to the user. Next, the user would click on the search bar and type what restaurant they want to search for (Figma does not support a user typing so you can only click on the search bar). Click on the search bar to represent the user typing in "Panda Express"

and to navigate to the next page. This brings up a screen that has only the restaurants that the user typed into the search bar in order from closest to furthest. The user would then click on the restaurant they are going to and be navigated to that restaurant's page of information (click on the first Panda Express restaurant at the top of the list). Finally, the user would scroll to the bottom of the page to see what guidelines the restaurant follows.

The second task would be for a new user to go onto the app and leave a review of a food location. After creating a profile, the app would filter for restaurants that were catered to the user's profile information and after the user chooses somewhere to eat, they could leave a review for the restaurant. First, the user must go into the app and click on the profile icon to set up their profile with their food allergies, dietary restrictions, and any other food needs/preferences, such as a preferred diet. Next, the user would go back to the home page and the restaurants would be filtered to their profile sorted from closest to furthest away. The user could then click on the restaurant that looks appetizing to them and check to see if they have what they are looking for in a restaurant. After eating at said restaurant they could leave a review with an optional photo of their experience. To represent this task, start at the home page. Click on the Pizzaz restaurant at the bottom of the page. Now click on the "Tap to add review" at the bottom of the screen to see what the add review screen looks like.

The final task would be for the user to be able to make a profile on the app and after they have inputted their restrictions, they could then go back to the home page and search for grocery stores that have ingredients for what kind of food the user wants to make. First, the user would go into the app and create their profile by choosing what kind of restrictions or allergies that they have. Start at the main page and click the profile icon in the top right corner. Figma does not let you input text, so imagine this is your profile; hit the save button to navigate back to the home

page. Next, they would go back to the home page and click on the filters for grocery and Italian cuisine which would then filter the app to show grocery stores that have Italian cuisine ingredients that cater to that user's preferences. To demonstrate this, click on the groceries icon at the top of the home screen. Now click on the Italian icon at the top of the grocery store screen. Imagine the app took you to a grocery store that offers Italian cuisine ingredients that cater to your restrictions. After finding the store that they like the best, clicking on that store would bring up recipes that the user could make with the ingredients found at the store. Clicking the more button (plus icon) on the recipe would then bring up where each ingredient is located in the store for the recipe, making it easy for the user to find what they are looking for. Click the plus icon next to the Vegan and Gluten-free pizza to see where a user can find those ingredients.

Design Rationale

We designed the prototype in a way that made it work towards the persona's goals of finding ways to spread awareness for people who have dietary restrictions and allergies and still be able to participate in social gatherings with friends. This was achieved by allowing users to input their own restrictions into a profile that would filter restaurants that cater to their needs and also allowing for a review system where people could leave reviews for the restaurants and ratings that others could use to find places to go with friends or just out in general. It incorporates the requirements we have using similar means by trying to make every user's experience fresh and safe using those same systems mentioned. It also helps the user allow for meal planning by giving different recipes and ingredients for grocery stores that are near you based on your location.

Besides meeting our requirements for our user persona, we wanted to focus on intuitive navigation and immediate engagement for the user. We have a smooth transition from the welcome screen onto the home screen, where the user can immediately get into use the app. The primary page immediately filters our restaurants that are unsuitable for the user and has a personalized list of recommendations. In order for this to be possible, we also created an easy way for the users to create a profile that would help tailor their experience to their personal recommendations. This allows for each user to be seen and catered to and allows our users to have a seamless experience when using our application. We also included an array of icons under the search menu to have a quick and efficient way to sort through different types of food they would be able to have. We decided to add clear and visually telling apps to enhance the experience and decrease the cognitive load by providing clear and recognizable icons that specify each different type of navigation and choices. Since we are an allergy application that focuses on the users, we wanted to make sure that the users had the most crucial information first to make quick and informed decisions. This is why we decided to immediately show the distance and the rating on the homepage for the users to make a fast and informed decision. The users are also able to get a more in-depth representation of the restaurant and their food standards if they click on the restaurant or location to receive a personalized review section and a quick warning or key information on the type of preparations that the location partakes in. We took a lot into account for the UX and UI, trying to follow established patterns to ensure that the experience for the user was pleasant and easy to use, aesthetically pleasing, and had an intuitive and natural usage pattern that the user could immediately understand. We wanted to have the experience be as smooth as possible as we were also trying to create a safe space for our users and align with their expectations from our application.

Prototyping Decisions

For the prototype, we can't create some portions of the app that we would want to due to the limitations that Figma has on creating a prototype, so we decided to go with some of the features that we believe are key parts of the app. For example, Figma does not allow a user to input text directly, so we added additional screens that demonstrate how the app would respond with text a user would normally enter, such as researching if Panda Express has suitable food and creating a user profile with the allergies and restrictions we chose. We wanted to make sure that the user could do a demo of making a profile with some basic restrictions and using that to make decisions on where the user should eat. We also wanted to show off some of the options that the user could use to decide on what type of food they would like to eat and cater to those choices. Finally, we thought that the rating system should be implemented to show the interconnected network that people will have when they use the app which goes in line with our persona's goals.

Something that we wanted to implement too was making page navigation and error handling as simple as possible in order to make sure the user would have a good time navigating the app. We tried to make sure that most things led to another page, whether that was a page that simply said the page was under construction. Something that we couldn't do was do a lot of the filtering checks because Figma doesn't allow for that type of interaction, and it also doesn't allow for people to type things into text boxes or search bars which means we have to hard code the options that the user chooses; it doesn't flow very well because of that. Not all of the icons and buttons lead to the correct page because we wanted the model to be simple and because it is unnecessary to implement every single aspect of what the full app will look like.

App Demonstration Movie:

https://drive.google.com/file/d/1gOX2cAlj5aXA1n5YmxqR6nKlt09ysYSq/view?usp=drive_link

Team members' contribution

- Alex Karapetkov: I worked on the app design using Figma to properly demonstrate our tasks. I also contributed to the tasks in the design description section and to the prototyping decisions section.

- Ryan West: Created video animation and annotated the tasks to represent the application's functionality and the user inputs.

- Samuel Joo: I worked on the design rationale section of the paper and helped with some of the design on the Figma prototype

- Josh Kuesters: I worked on the design of the prototype on Figma and wrote the design description on the paper. I also worked on the tasks for the prototype and worked on figuring out the prototyping decisions.