Group 5:

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Project Topic:

Project idea is a local food drive and donation campaign. We are targeting all residents of Harrisonburg such as the townees and students. What we are trying to do is design something to make food donation as easy as possible. Our original idea is making some kind of app that allows users to request food donation pick up from their house. This makes donating food fast and easy, users don’t need to go out of their way to donate food.

Design Description:

Our group developed our application's interface, foodrive, using a recommended user interface plotting software called Figma. Using Figma, we were able to create a prototype that simulates the interaction between the user and the product. Here is our prototype:

https://www.figma.com/file/Qnb9jYyYPFX7WSFKgOWxAw/G4?type=design&node-id=0%3A1&mode=design&t=duq5x2r6cUp2USUt-1

We have seven "frames," or mobile screens in the Figma workspace. The "Home" Screen is what the user sees when they initially open the application. We purposefully created the "Setup Pickup" button to be ostentatious. Creating pickups is our main goal for the mobile app, so we made the button as noticeable as possible. In the top left and right of the screen are the "Settings" and "Account" buttons; which will be elaborated on later.

Once the user selects the "Setup Pickup" button, they will be taken to the "Fill Out Order" screen. Here the user can list their personal information like: address, name, phone number, email address. This is needed for the driver to go to the pickup address and communicate to the user. There is also a pickup-time for the user to pick. In addition, we included a slider for the amount of items the user is donating. There is a colossal button named "Confirm Pickup," which takes you to the next screen.

The user is now taken to the "Confirmation of Order" screen. This screen allows the user to confirm that their order has the correct information. However, we did not implement the

ability to change or ‘go back’ from this page. This is not a full-implementation of our product, and we did not think it was crucial to our tasks.

These first three screens allow the user to pass our first task; setting up a food pickup. From traversing from the “Home,” “Fill Out Order,” to the “Confirmation Of Order” screens, a user is able to successfully create a food pickup. Our second task, making an account to streamline interaction with the app, is where the “Account” button is used.

The “Account” button, which has been present on all screens mentioned so far, is universally used for navigation to the “Sign In” screen. In this screen, this user is able to either login to their existing foodrive account or they can create a new one. Logging in will simply take the user back to the home screen; however, now they will be logged into their account. They will be able to use the “Leaderboards” functionality now they are logged in.

If the user does not have an account, they can create one in the “Sign Up” screen. The user traverses here by pressing the “Sign Up” button in the “Sign In” screen. In this screen, a user can create their account by filling out their personal information. After they are done, they can hit the “Create Account” button which will take them back to the “Home” screen. Going through the “Account” icon, having the choice to login or sign up, and if you are signing up to have a “Sign Up” screen passes our second task of making an account to streamline interaction with the app.

Now that the user is logged in, they are able to use the “Leaderboards” functionality. The Leaderboard is used to see how much a user donated compared to his neighbors. We implemented this to create a competitive and long lasting relationship between the application and our user. To access this, the user must tap on the “Options” button.

By touching the button, the “Options Header” will slide right onto the screen. This provides the user with multiple different choices to choose from including: Leaderboards, Donate, and Options. The user can leave this by pressing the “X” button at the top left. However, if they pick the “Leaderboards” option they will navigate to the “Leaderboard” screen.

In this screen, the user can see where they rank compared to their contemporaries. At the bottom of the page, there is a “Home” button that will navigate back to the “Home” screen. With that, our third task, the user wants to check their standing in the leaderboard, is done. They did this by tapping on the top left “Options” button, then tapping on the “Leaderboards” button in the submenu, and then finally seeing their rank. We created error recovery with an escape key on the “Options Header.”

Design rationale:

For our project's design we stuck to a traditional and intuitive set of icons to improve usability. For instance, we used the icon of a person in a circle to signify the “account” tab of the application. We also employed the slider icon to show the options page of the application. These choices comply with our team's commitment to create an intuitive interface for our persona, this interface creates a non time-consuming process by which the user can quickly and effectively navigate throughout the application.

In our design, we incorporated scheduled pickup times as a horizontal row of buttons that contain available pickup times. The functionality of this section was filtered out in order to showcase the overall usability of the task, but in the actual product, the user would be able to

slide left and right to select the available time that best suits them. This aligns with our goal of having the ability to set a short window for the pickup of the item.

On the confirmation page, there is a placeholder image that would hold a banner of the company the user's food is going to, as well as listing their pickup address, time, and name for them. There is also a small map that shows the location. This ensures that the user can check their address, location, and know the company that is picking up their produce. This satisfies our criteria of Certification for organizations and branding visibility.

Our prototype includes a leaderboard which lists local users in terms of the number of cans of food they've donated. This keeps track of users' donations and allows for friendly competition amongst users. This satisfies our requirement of donation records.

Overall, our prototype employs many best practices for User experience and UI patterns. We employed using large buttons, keeping screens as atomic as possible, meaning that a user is not bombarded with an overwhelming number of options or different tasks on any one screen. We employed large buttons to keep with the mobile-first design pattern that is industry standard. We kept to a strict color scheme in order to ensure users can recognize our application. The icons used are all intuitive, and used in most applications, such as the user icon, the X icon to exit a function, and the slider icon to represent options. These design choices led to the creation of an easy-to-navigate, quick-to-learn, and extremely accessible application.

Prototyping decisions:

Describe and justify the prototyping decisions you made in creating the Figma prototype.

For the **home wireframe,** we figured this was just going to be our landing/home page. This is where the user can choose what to start out doing eg. creating an account, logging in,

signing-up, seeing their leaderboard position and starting a pick-up request. The user may navigate to wherever desired through this page with all the buttons we added. We also decided to add a picture to the middle of the screen. This picture for now is a placeholder but in the future will show something more significant that has something to do with our product. The color way chosen here is the same colorway we followed through the rest of the application as well so make it visually pleasing.

For the **fill out order wireframe,** we stuck with our original design idea and just obviously added more detail and shine to it such as colors and input boxes to show where the user needs to input their information to complete their pick-up request. The time-to-pick up section is where the user can select a time that they would like to have their items picked-up. They can scroll and select whatever time they please (as long as it is during business hours) (also this is not a functioning part for this prototype. Number of items is the same concept: they can select as many items as they want and just drag the ball up and down the line to select how many times they are donating today. (Again, this is not currently functioning for this prototype.)

For creating the **confirmation of order wireframe**, we decided to include a "pick-up handled by" section to let the user know who was coming to get their order which was not a part of our original design idea. We did this because as we were creating the prototype we noticed that this particular wireframe just seemed short and bland and could use something else. The other thing we added was a "home" button so the user could navigate back to the home page and do as he pleases. Such as, maybe he wants to create another order or go check his leaderboard position.

For the **Sign in wireframe**, we made the decision to switch to a large sign up button to attract the user's attention. We changed to that button on our prototype from the original smaller

text that said "Create One" underneath the question asking if the user had an account. We felt that with the larger button and larger text it was more likely that the user would go to make their account and would eliminate any possible issues that the user could have.

For the **Sign up wireframe**, we have the user fill out all of the important information that we would need to make sure that there are no issues when creating an account. We made sure to capture the name and address of the user as well as the email and phone number so that there will not be any issues when creating an order to have their donations picked up. The user then chooses a username and a password for their account. This was the information that we felt was essential for the user to fill in for their account. Once all of that information is filled out the user sees at the bottom of the page that there is a large "Create Account" button that will be clicked once the information is filled out. We decided to make it a large button so there would be no issues for the user to be able to create their account to get started on their donations.

For the **Leaderboard wireframe**, we decided to have the leaderboard of the top 5 donors displayed on the screen. This decision gives users even more incentive to donate since their name will be displayed on the Foodrive's app for all users to see. This allows the top donors to feel like they are truly making a change. Once the user is done looking at the leaderboard we allow the user to hit the large "Home" button right at the bottom that will send the user back to the main page where they can set up a pickup if they would like to get their name up the leaderboard.

For the **options header wireframe,** this visual is what the user would see when they click the top left button on the home screen. This displays different options that the user can choose from. The only current functionality for this is choosing the leaderboards option because we only added functionality to complete the tasks we talked about. Again this follows the same

colorway as all the other wireframes to make it visually pleasing. Users can also hit the top left "x" button to exit just in case they do not want to select an option.

Team members' contribution:

For each team member, describe in 1-2 sentences what they personally did toward completing this assignment.

- Jared Householder: Helped with the design process/ designing the wireframes in figma and linking the wireframes together. Filled out necessary information for design description. Also did half of describing the prototyping decisions.
- Andrew Hansen: I helped to create the transitions from frame to frame in Figma. I wrote the Design Description. I filmed and edited the movie exploring all the paths of our product.
- Nick Simoncelli: I created the login page and the consumer information for the prototype of the wireframes in Figma. I also wrote half of prototyping decisions.
- Salman Khattak: I assisted with the initial creation of the Figma file, I handled the formatting, coloring, and design of the final prototype, and I wrote the design rationale.

Movie:

https://drive.google.com/file/d/1j-eI6ew9fzoqPP6c6c2_QANIaYKN3vyK/view?usp=sharing