Food Oasis

For Everyone

Zi Li Pan
Justin Heyer
Lucy Sileo
Simran Zaveri

Purpose

- In the United States in 2021:

    - 33.8 million people lived in food-insecure households (ERS, 2022)

    - 5.0 million children lived in households with very low food security (ERS, 2022)

While food waste is estimated at between 30–40% of the food supply (FDA)...

Goal

- Make food readily available for those in need

- Provide an easy way for people to give away excess food

- Give buyers easy access and knowledge to nearby produce that would

  otherwise go to waste

Functional Requirements

- System shall allow sellers to login their account with a email/username and password

- System shall allow users to enter types of food into the search bar

- System must let seller enter new food if need be

- System makes sure to return location for buyer and seller

- System shall allow users to have displays of types of food

Non-Functional Requirements

- System should provide a user interface that is easy to navigate for first-time users and is visually appealing

- Response time shouldn't take long to find sellers (within 3 sec)

- System should function on all popular browsers and mobile devices

- System only allows users to create account with strong enough password (>= 6 characters)

- System should support 1000 simultaneous users

Food Oasis

For Everyone

Demonstration

Achievements

- What we achieved
  - Buyer and seller sides for giving and receiving food
  - Implemented the map API using mapbox
  - Letting the buyer look around their location to find if any food sources available
  - Allow sellers to choose the food types and add location for their Oasis

What we'd do with More Time

- Figure out our issues with connecting Firebase

  - With this, adding the actual creation and deletion of Oasis'

- Data scrape information on food banks across America and upload this to our database

- Changing the system so that you do not get an Oasis' exact location as this is possibly a security issue for our sellers

Team Experience

Works Cited

- Economic Research Service - U.S. DEPARTMENT OF AGRICULTURE. (2022, October 17). *Food Security Status of U.S. Households in 2021*. Key Statistics & Graphics. Retrieved November 29, 2022, from https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/#:~:text=In%202021%3A,with%20adults%2C%20were%20food%20insecure.

- FDA. (n.d.). *Food Loss and Waste*. U.S. Food and Drug Administration. Retrieved November 30, 2022, from https://www.fda.gov/food/consumers/food-loss-and-waste

Thank you for your time