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COURSE: CSC 415 – 01
ASSIGNMENT 6: OPEN SOURCE SOFTWARE: FINAL PROJECT

1) Provide a brief description of your project and identify the main functionality that has been implemented so far.

Github:

https://github.com/nairp2/webapp

Social Justice Issue:

Some people order food from restaurants by ordering online on the website or by having a meal in the restaurant. However, some people tend to waste their food by disposing the leftovers whether they touched the food or not in the trash. I believe the food that hasn't been touched can be preserved and returned to the restaurant for future orders. This way there is less food wastage and less hunger. The social justice issue I am addressing is hunger.

Project Title:

Food Waste Awareness

Option 1 or 2:

Option 2

Web – based or mobile application:

I am planning to create a web – based application using ruby on rails with PostgreSQL. I also used scaffolding for my database and bootstrap for the design HTML/CSS.

Project Idea:

I am planning to create an application where people can provide their feedback based on their order and the web application will provide different slots for the user to input their opinion like specify the food they ordered, whether any part of the food got wasted, their comments on the food, and the restaurant's name so that the website can keep track of the consumer food details. The organization retrieves the feedback and can send suggestions to the restaurant via email. The administrator is responsible for modifying or deleting feedbacks. This system will educate the consumers of what food type and how much food quantity to order the next time and the restaurants are educated of consumers' preferences by updating future menus which prevents wastage of food.

Food scarcity is a significant issue in today's world where 15 percent of America's population is under poverty. This website keeps people in check of how much food they are wasting and try to order within their capacity.

Algorithm:

I am thinking of creating a website that allows users to enter feedback and details of their food order into the website. These details stored in a database where organizations can access user feedback by clicking the organization tab which redirects them to it. The administrator can click the administrator tab which also redirects them to the user feedback. However, the user and organization have to login in order to access the feedbacks. This involves creating a login option where users and organizations have to first create an account by entering their username and password and then login normally. This web application is implemented in an agile process model. I won't be using significant data structures. However, for the feedbacks, the data structure used are multiple arrays for the food order, comments, show, edit and delete.

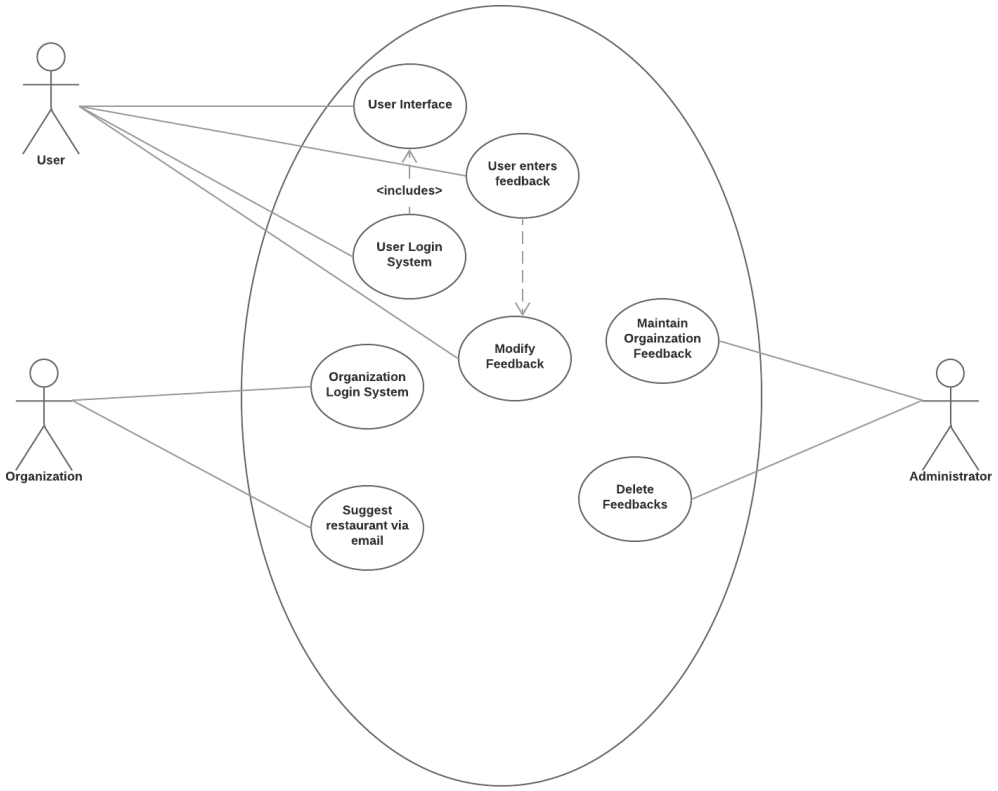
Concepts I Expect to Learn:

By creating this web application, I expect to have a good understanding of Ruby programming language on Rails. I also get to learn how web applications code in Rails interact with routing between MVC (Model View Controller).

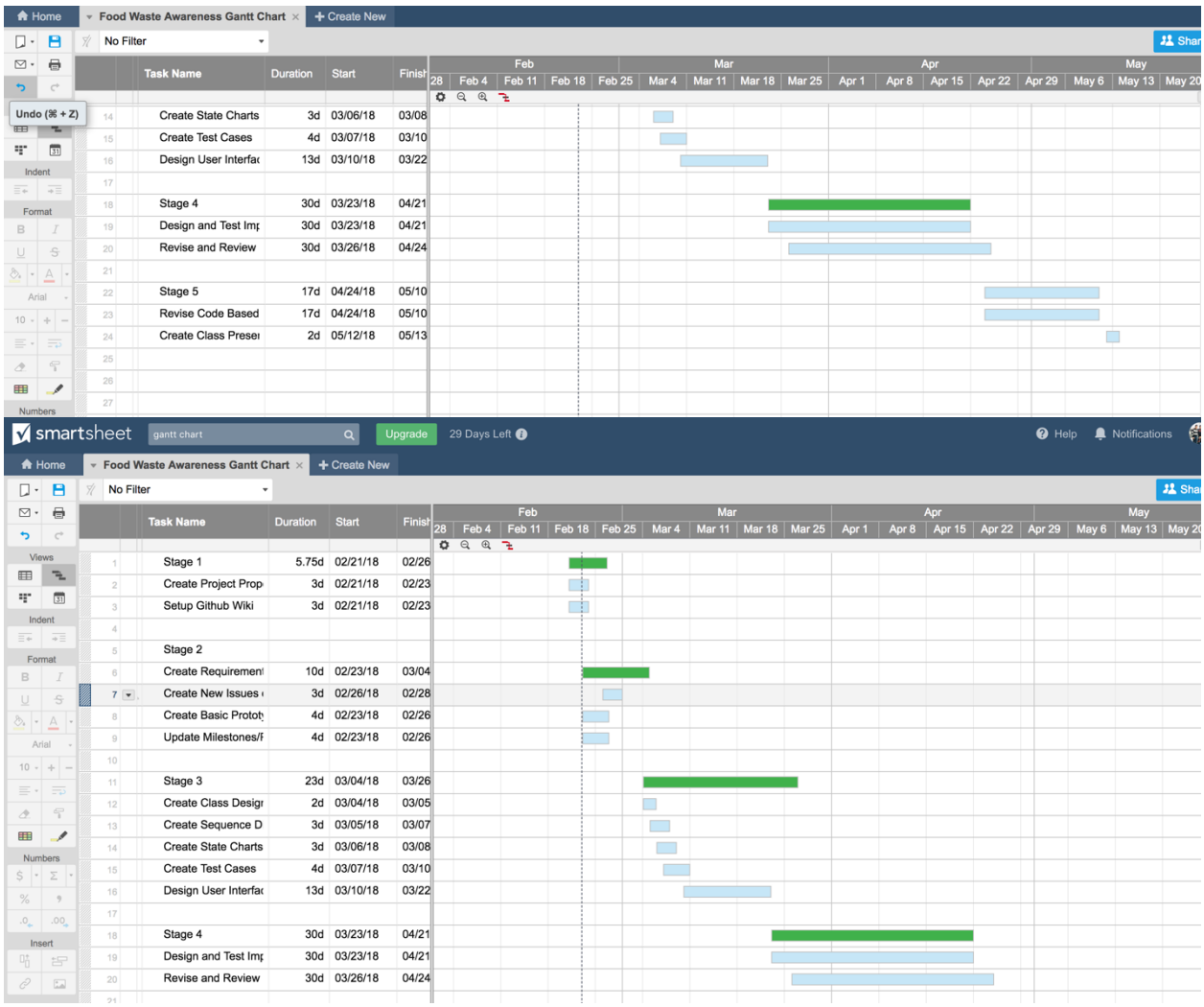
Open Source License

I chose the MIT License. It is a free software license that puts very limited restriction on reuse which makes it an excellent license compatibility. It is the most popular software license. This license protects the developer from any liability causes by external contributors. The MIT License seems the ideal choice for my Food Waste Awareness Website since it has a lot of code files that rely on one another. If by accident, someone modified a single code file, it would disrupt the other files as well which would make it difficult for me to debug each file code.

Use Case Diagram


User
User Interface
User enters feedback
<includes>
User Login System
Modify Feedback
Maintain Orgainzation Feedback
Organization
Organization Login System
Suggest restaurant via email
Delete Feedbacks
Administrator

Gantt Chart



2) Test Cases

1) Login Page Authentication

Description: User/Organization login to their account

Steps:

1. User/Org selects login from homepage
2. User/Org enters login information
3. Login outcome:

Login fails for incorrect information and user/org is brought back to login page. Provides error feedback

Login is successful for correct details and can access feedback/organization tabs.

Reason: I implemented this way so that the users/organizations cannot access the tabs directly without logging in.

Expected Results: User/Org has the ability to access feedback/organization tabs

2) Entering Feedback

Description: User clicks feedback tab and enter food details
Steps:

1. User clicks feedback tab.
2. User enters food details

Reason: This allows users to enter their opinion on the food they ordered

Expected Results: User can enter feedback which is sent to the database

3) Administrator

Description: Admin clicks administrator tab and modify or delete feedbacks
Steps:

1. Admin clicks administrator tab
2. Admin selects delete to delete feedback or selects edit to modify feedback

Reason: Administrator has the most power to a system. Hence, the admin can access the database of user and organization.

Expected Results: Administrator has the ability to modify and delete feedbacks

4) Organization

Description: Organization clicks organization tab and can send suggestions to restaurant
Steps:

1. Organization clicks organization tab
2. Organization selects show and enters suggestion
3. Organization clicks send email

Reason: This allows organizations to receive user feedback and send suggestions to restaurant via email for future orders.

Expected Results: Organization provides suggestions to restaurant via email

Functionality Tested	How Functionality was Tested	Actual Result
Login Page Authentication	Empty/Incorrect details	Stay in same page
Login Page Authentication	Valid user details	Redirect to homepage
Entering Feedback	User review on food	Sent to feedback database
Administrator	Click Edit/Delete feedback	Modifies or deletes feedback
Organization	Clicks show	Provide suggestion to restaurant via email.

I was able to follow my test cases after implementing the web application. I had to adjust some test cases in order to make it output what I wanted. It is user friendly and easy to navigate. I used scaffolding for creating the database of the feedbacks which acts like a central domain for the web application where user, organization and admin can access.

• Full link to the private project repository on GitHub.

/home/student1/webapp/code/prototype/student1

• Detailed instructions for installing and using the application, including information about the expected environment for successful execution, e.g. operating system, type of device, supporting software, etc.

Commands:

1) Go to terminal login with my username and password in student 1
2) Enter the path way : webapp/code/prototype/apps….
3) Type rails server in command line.
4) Link to web application(Google chrome recommended): http://csc415-server18.hpc.tcnj.edu:3000/

• Known bugs, issues or limitations. Fixed lag issues I had earlier with a more efficient algorithm.