CSYE 6200 Assignment 3

Q1. Team name (as cool as possible)

- Ligma

Q2. Team member's names

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Q3. What is the problem you plan to solve?

- The Food Donation Management System (FDMS) is a software application designed to streamline and automate the process of managing food donations.
- It provides an efficient platform for organizations and individuals involved in collecting and storing to efficiently handle their operations. The system aims to reduce food waste. These challenges include:
    1. **Food Waste Reduction:** One of the primary problems that a Food Donation Management System can tackle is the reduction of food waste. By efficiently connecting donors with surplus food to organizations and individuals in need, the system ensures that edible food does not end up in landfills, but instead reaches those who can benefit from it.
    2. **Enhanced Access to Nutritious Food:** Many individuals and families struggle with food insecurity and lack access to nutritious meals. A Food Donation Management System helps bridge this gap by connecting food donors with organizations that can distribute food to those in need. It ensures that nutritious food items are available to vulnerable populations, promoting their health and well-being.
    3. **Streamlined Inventory Management:** Donating organizations often face challenges in managing their food inventory, especially perishable items with limited shelf life. The system enables efficient inventory management by tracking donated food items, their quantities, and expiration dates. This ensures that food is distributed before it expires, minimizing waste and maximizing the utilization of available resources.
    4. **Real-time Monitoring and Reporting:** A Food Donation Management System can offer real-time monitoring and reporting capabilities. It allows organizations to track and analyze metrics such as the quantity of food donated, the number of meals served, and the impact of their efforts. This data helps identify trends, measure progress, and make informed decisions to optimize operations.

- **Increased Donor Engagement:** Many potential donors are willing to contribute to food donation efforts but may lack the knowledge or means to do so. A Food Donation Management System can raise awareness and provide an accessible platform for donors to participate actively.

Q4: What is the idea to solve the problem?

- The system can be designed to capture and store data on donor's details, food management, storage, and other relevant information.
- The system can also generate reports and performance analysis that can be easily accessed and shared with administrator. By implementing this system, charities can reduce manual data entry, minimize errors, streamline the process, improve efficiency, and ensure transparency and accountability.
- Allowing different user authentication and authorization, such as donor's and administrators. Adding, editing, and deleting donor's information, including personal information, donation information.
- We will integrate it with a csv file to generate reports and charts to analyze a donor's overall performance.
- The idea is to support the upload functionality of CSV files.
- When an Admin uploads a CSV file, the user will be prompted to select the graphs that he is interested in.
- Based on the Admin's choice, the graphs and plots will be rendered in the UI.
- This will give the user the opportunity to understand and infer some meaningful insights from the visualizations.
- At present, we are thinking about the following visualizations, based on the time we will add more features to it.
    1. Bar Graph
    2. Pie Chart

Q5: What topics of CSYE6200 will be covered?

The following topics will be covered in this project

- JavaFX
- Class Definition
- Inheritance/Polymorphism
- Abstract Classes/interfaces
- Generics/Collections/Iterators
- Set/Maps

Q6: What tools will the team use to work on it?

- Git & and GitHub

- Code repository
- Code management

- Eclipse
  - Code Editor
  - Project builds

- Scene Builder
  - To build UI & UX

- Trello
  - Project Meetings
  - Task management

- Documentation
  - Microsoft word
  - Microsoft PowerPoint

Q7: What is your schedule for the project?

Dates	Task List	Comments
Week 1 July 15th – July 22nd	Backend code for following: 1. Donor's Login Page 2. Creating admin role, search, and delete features for admin login. 3. Sign-out option	We must develop code with UI and backend this week. So, we have enough time to integrate and test. Adding admin login page Code check for login credential. Searching and deleting operation on all donor's records only for admins
Week 2 July 23rd – July 29th	1. Integration of UI and Backend Code (Database connection) 2. Testing 3. Adding donation results page	Integration and database installation with connectivity should be done in first part of week. Database for donation result. Features addition for Donor's login can be made

	4. Implementing update operation for Donor's login	in the second part with combo box and submit for saving data in the db.
Week 3 July 30th – August 5th	1. Pie charts for numerical variables 2. Bar graph for numerical values 3. Code for uploading CSV file 4. CSV reports display page.	Integration of Pie chart and bar graph backend with UI to select and display output
Week 4 August 6th – August 8th	1. Project Documentation 2. Power Point Slides 3. Retrospection 4. Demo Preparation	We will concentrate on the documentation and demo for the last week

Meeting Schedules:

- Monday from 11: 30 to 1:30
  - Design Discussions
  - Milestones creations
  - ETAs
- Thursday from 11: 30 to 1: 30
  - Doubt clearing session.
- Sunday from 3:30 to 4:30
  - Weekly checkpoint
  - Progress check