CSE336

Software Design patterns

Phase 1

Team members:

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Contents

GitHub link of your project:

https://github.com/Mohamedamr3737/SDP_nonProfitCharity

Video link:

https://drive.google.com/drive/folders/1E5GXH2mKQbMllTdgtQmyLFG4HJ89DkCV?usp=drive_link

Code contribution of each member:

Name	Code contribution
Mohamed Amr Mohamed Anwar Awad El Mallah	• Singleton database • Core models • Authentication controller • Frontend view
Salma Nasrelden Aboelela Ahmed Hendawy	• Decorator receipt • User model • Payment controller
Yousef emad eldin elshahat brakat said	• Donation factory • Donation controller • Frontend view
Mohamed Ibrahim Elsayed Ibrahim Barakat	• Strategy login • Observer quiz game
Abdelrahman hassan fouad hassan aboelazm	• Observer notification • Index file
Heba Hesham Hashem AbdElbakey Mansour	• Strategy payment • Donation controller

Clients requirements for phase 1:

- User needs to login and signup.
- The login is in different ways as email, social media login.
- User need to donate.
- User can donate with his name logged in with or with another person name.
- Donations can be many types (e.g. money, service and product).
- In money donations, we need online, in-kind, check payment.
- In online payment, we need different payment gateways as stripe and PayPal.
- User need to be notified after donation is completed.
- We need quiz game to increase user knowledge.
- User UI need to be simple, smooth and easy to use.

CRUD lookup tables for phase 1:

```sql
CREATE TABLE IF NOT EXISTS users (
    id INT AUTO_INCREMENT PRIMARY KEY,
    firstName VARCHAR(50) NOT NULL,
    lastName VARCHAR(50) NOT NULL,
    phone VARCHAR(15) NOT NULL UNIQUE,
    type ENUM('donor', 'volunteer','beneficiary') NOT NULL,
    email VARCHAR(100) NOT NULL UNIQUE,
    password VARCHAR(255) NOT NULL,
    login_type ENUM('email', 'social') NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);

CREATE TABLE IF NOT EXISTS donations (
    id INT AUTO_INCREMENT PRIMARY KEY,
    donorId Int Null,
    donor_name VARCHAR(100),
    donation_type ENUM('online', 'check', 'in-kind', 'product', 'service') NOT NULL,
    amount DECIMAL(10, 2),              -- For money donations
    product_name VARCHAR(100),          -- For product donations
    service_description TEXT,           -- For service donations
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    FOREIGN KEY (donorId) REFERENCES users(id) ON DELETE SET NULL
);
```

In this donation table we didn't need to make donation and donation_items table as user can submit one donation type at a time and many donations at the same time will be implemented at the following phase with phase 2 patterns.

Class Diagram: