

TABLE DESIGN

1.Users Table

Stores information about donors, volunteers, and administrators.

Column Name	Data Type	Constraints	Description
user_id	INT	PRIMARY KEY, AUTO_INCREMENT	Unique ID for each user.
name	VARCHAR(255)	NOT NULL	User's full name.
email	VARCHAR(255)	UNIQUE, NOT NULL	User's email (must be unique).
password	VARCHAR(255)	NOT NULL	Encrypted user password.
role	ENUM('donor', 'volunteer', 'admin')	DEFAULT 'donor'	Defines the user type.
created_at	TIMESTAMP	DEFAULT CURRENT_TIMESTAMP	When the user registered.

2. Causes Table

Tracks active causes for donations and volunteering.

Column Name	Data Type	Constraints	Description
cause_id	INT	PRIMARY KEY, AUTO_INCREMENT	Unique ID for each cause.
title	VARCHAR(255)	NOT NULL	Cause name/title.
description	TEXT	NOT NULL	Description of the cause.
target_amount	DECIMAL(10,2)	NOT NULL	Fundraising target amount.
raised_amount	DECIMAL(10,2)	DEFAULT 0	Amount raised so far.
status	ENUM('active', 'completed')	DEFAULT 'active'	Indicates if donations are still open.
created_at	TIMESTAMP	DEFAULT CURRENT_TIMESTAMP	When the cause was created.

3. Donations Table

Records donations made by donors.

Column Name	Data Type	Constraints	Description
donation_id	INT	PRIMARY KEY, AUTO_INCREMENT	Unique ID for each donation.
user_id	INT	FOREIGN KEY REFERENCES Users(user_id)	ID of the donor.
cause_id	INT	FOREIGN KEY REFERENCES Causes(cause_id)	ID of the cause donated to.
amount	DECIMAL(10,2)	NOT NULL	Donation amount.
payment_id	INT	FOREIGN KEY REFERENCES Payments(payment_id)	ID of the payment transaction.
donation_date	TIMESTAMP	DEFAULT CURRENT_TIMESTAMP	When the donation was made.

4. Payment Table

Column Name	Data Type	Constraints	Description
payment_id	INT	PRIMARY KEY, AUTO_INCREMENT	Unique ID for each payment.
user_id	INT	FOREIGN KEY REFERENCES Users(user_id)	ID of the donor.
payment_method	ENUM('UPI', 'Bank Transfer')	NOT NULL	Selected payment method.
transaction_id	VARCHAR(255)	UNIQUE, NOT NULL	Reference ID from bank/UPI.
status	ENUM('pending', 'completed', 'failed')	DEFAULT 'pending'	Payment status.
paid_amount	DECIMAL(10,2)	NOT NULL	Amount paid by the donor.
payment_date	TIMESTAMP	DEFAULT CURRENT_TIMESTAMP	When the payment was made.

5. Volunteers Table

Stores information about volunteers without specifying supported causes.

Column Name	Data Type	Constraints	Description
volunteer_id	INT	PRIMARY KEY, AUTO_INCREMENT	Unique ID for each volunteer.
user_id	INT	FOREIGN KEY REFERENCES Users(user_id)	ID of the volunteer (linked to Users).
location	VARCHAR(255)	NOT NULL	Location of the volunteer.
availability	ENUM('weekdays', 'weekends', 'flexible')	NOT NULL	When the volunteer is available.
skills	VARCHAR(255)	NULLABLE	Any skills the volunteer has.
created_at	TIMESTAMP	DEFAULT CURRENT_TIMESTAMP	When the volunteer registered.

6. Volunteer Causes Table

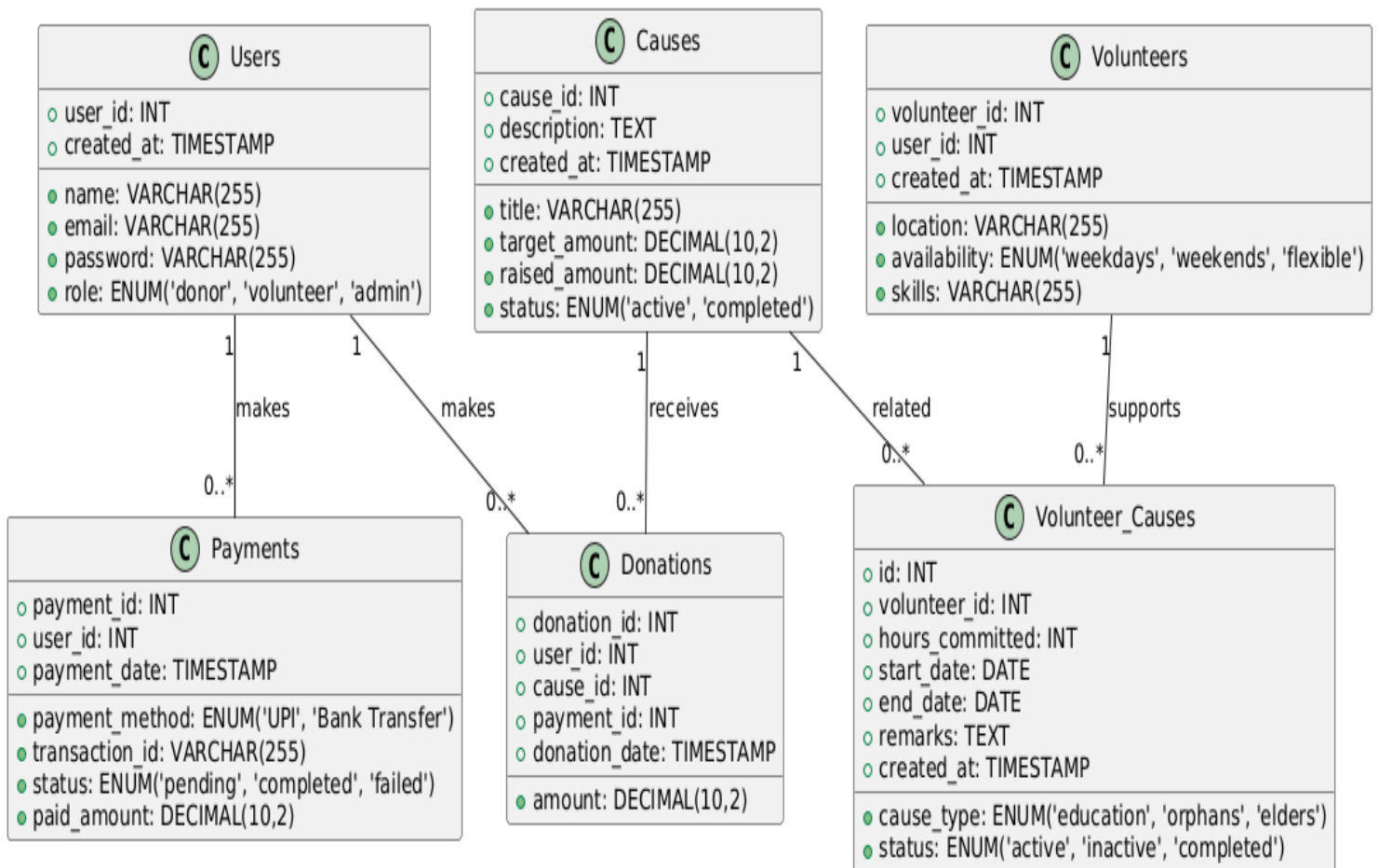
Links volunteers to the specific causes they support.

Column Name	Data Type	Constraints	Description
id	INT	PRIMARY KEY, AUTO_INCREMENT	Unique ID for each record.
volunteer_id	INT	FOREIGN KEY REFERENCES Volunteers(volunteer_id)	ID of the volunteer.
cause_type	ENUM('education', 'orphans', 'elders')	NOT NULL	The type of cause the volunteer supports.
hours_committed	INT	DEFAULT 0	Number of hours committed by the volunteer.
start_date	DATE	NULLABLE	The date the volunteer starts supporting the cause.

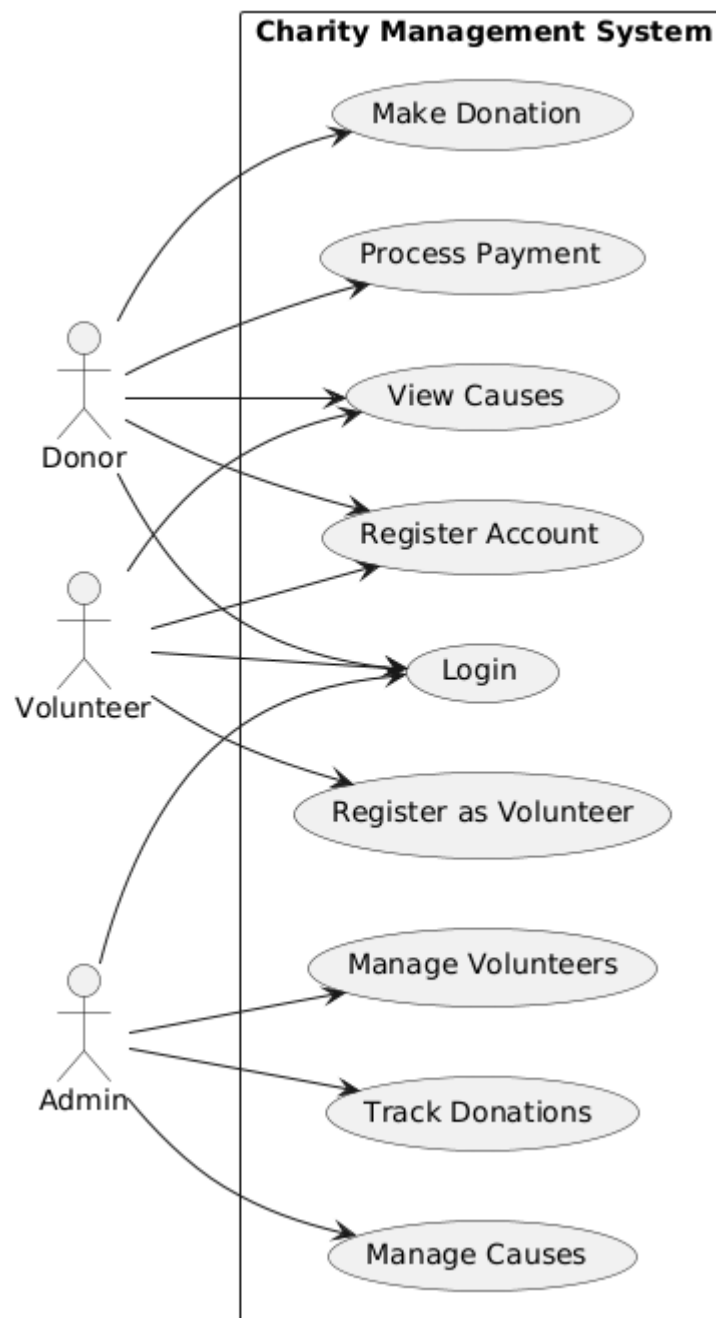
end_date	DATE	NULLABLE	The date the volunteer stops supporting the cause.
status	ENUM('active', 'inactive', 'completed')	DEFAULT 'active'	Status of the volunteer's participation.
remarks	TEXT	NULLABLE	Any additional notes or comments about the volunteer's work.
created_at	TIMESTAMP	DEFAULT CURRENT_TIMESTAMP	When the record was created.

UML DIAGRAMS

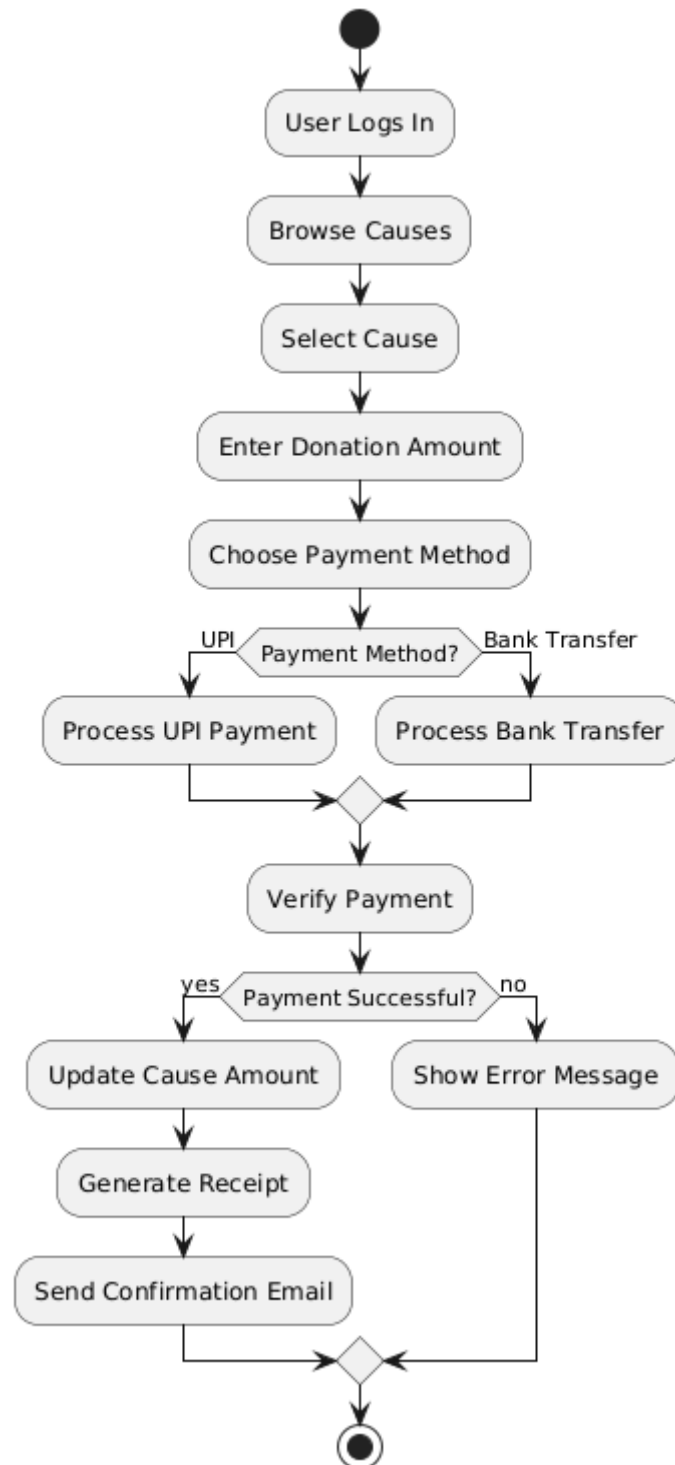
1.Class Diagram



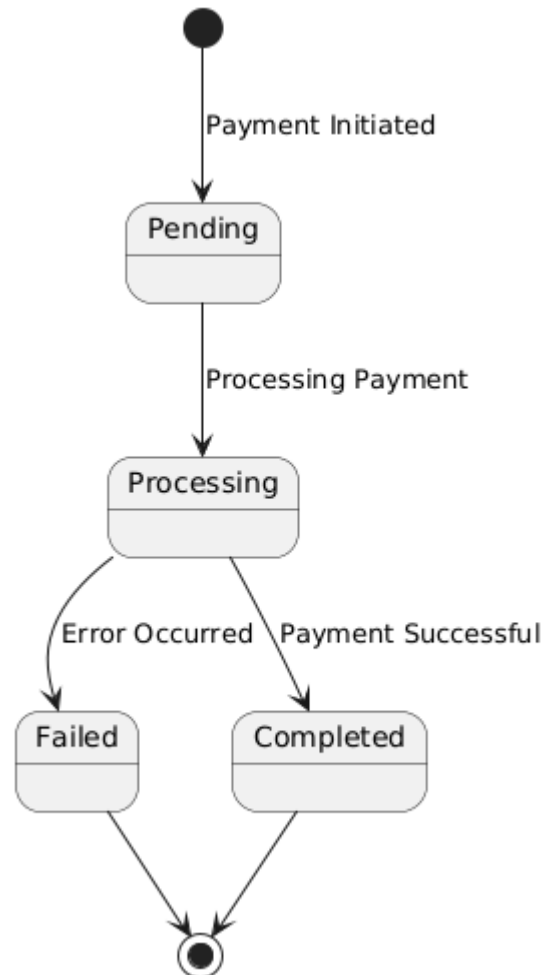
2. Use Case Diagram



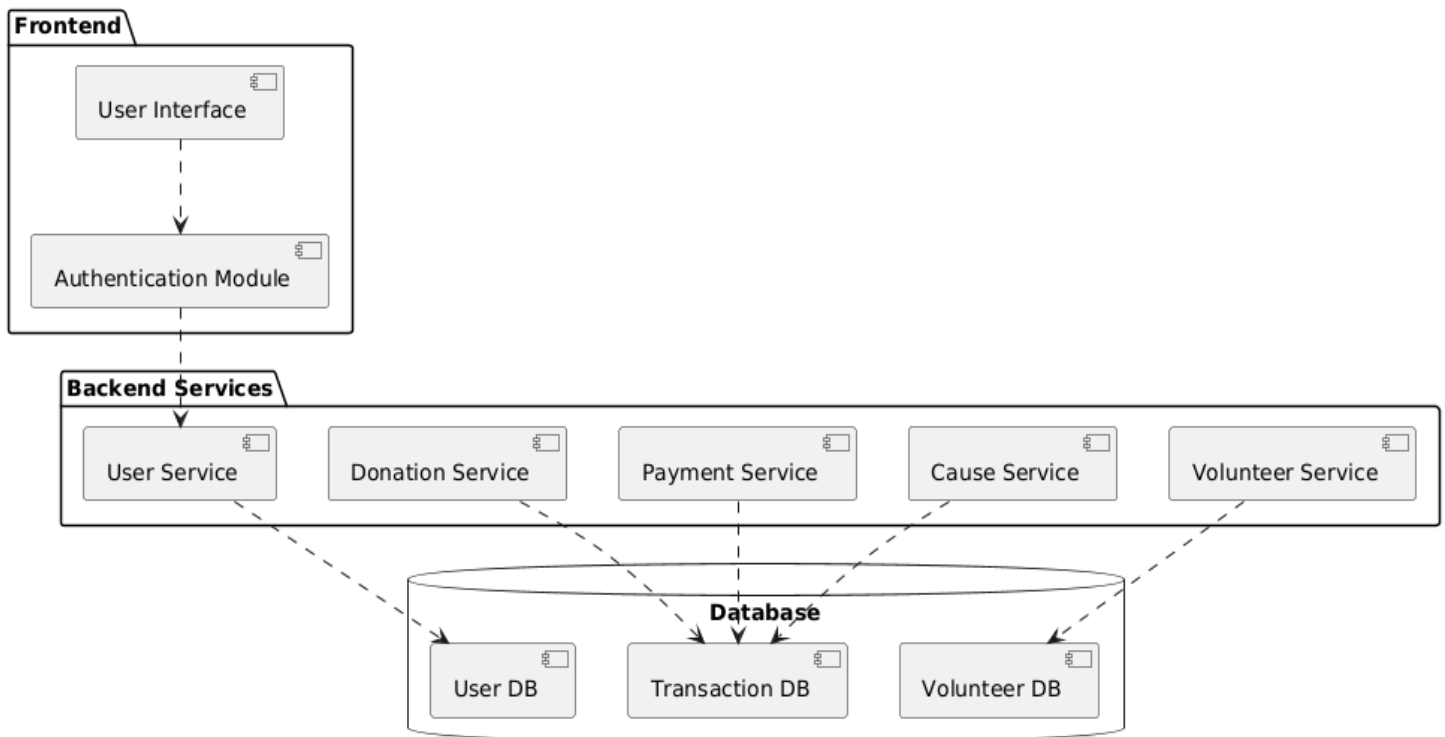
3.Activity Diagram



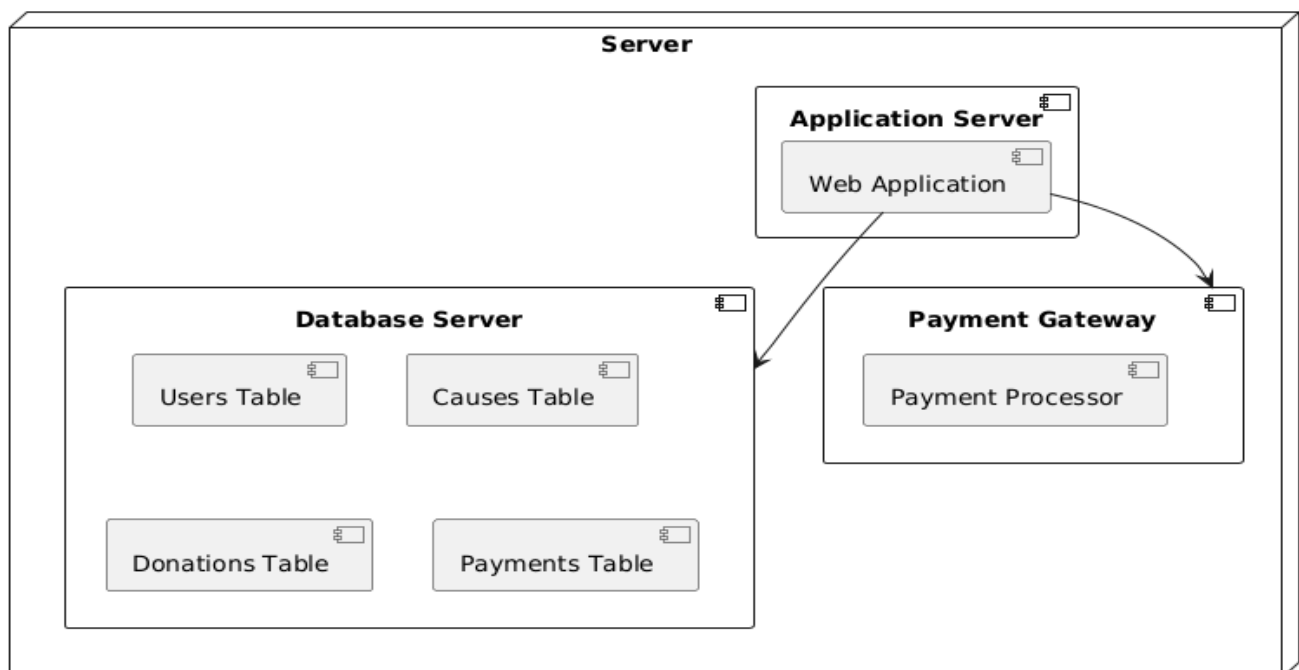
4.State Diagram



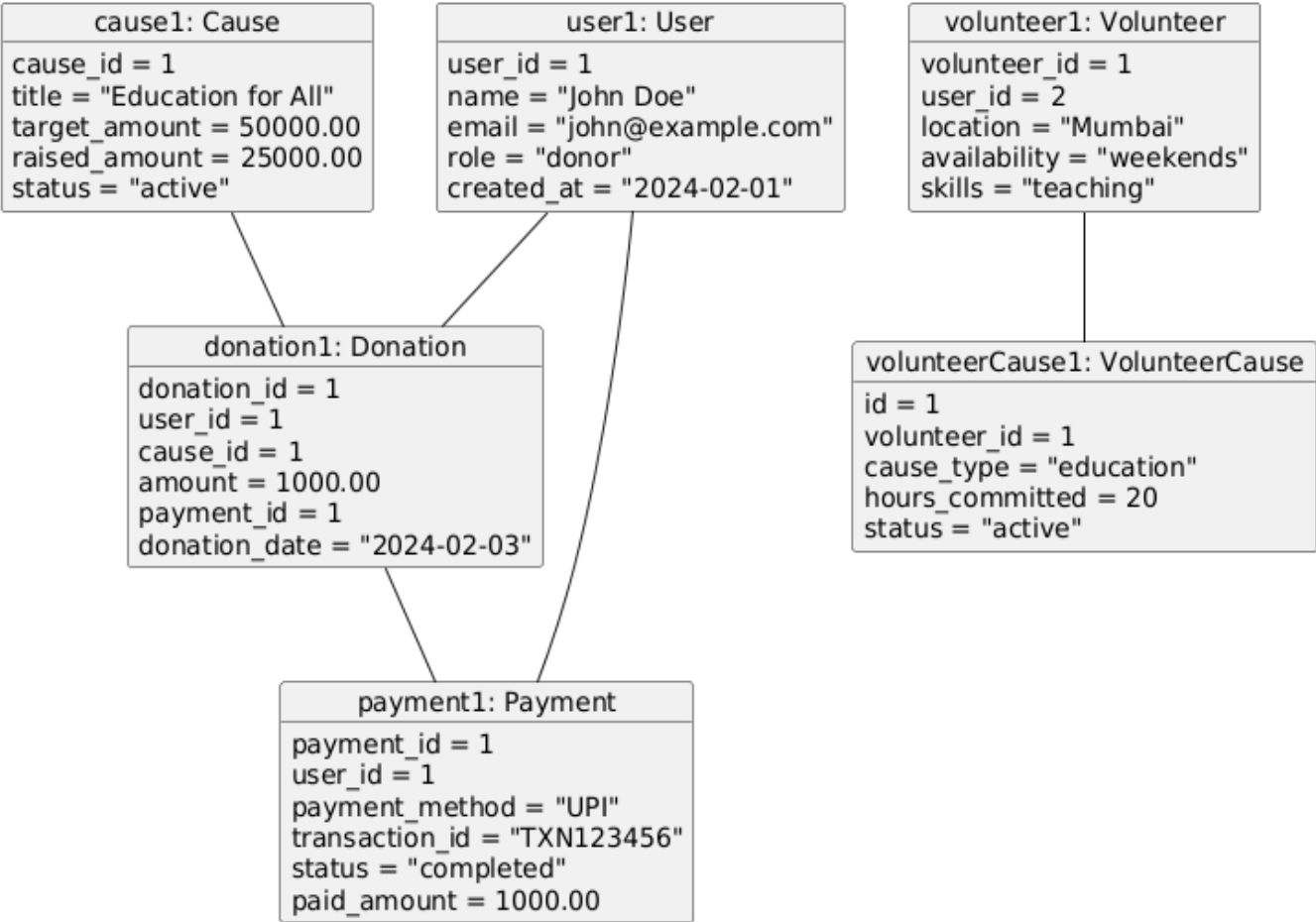
5.Component Diagram



6.Deployment Diagram



7.Object Diagram



8.Sequence Diagram

