Mainstream System Analysis and Design

Charity organization
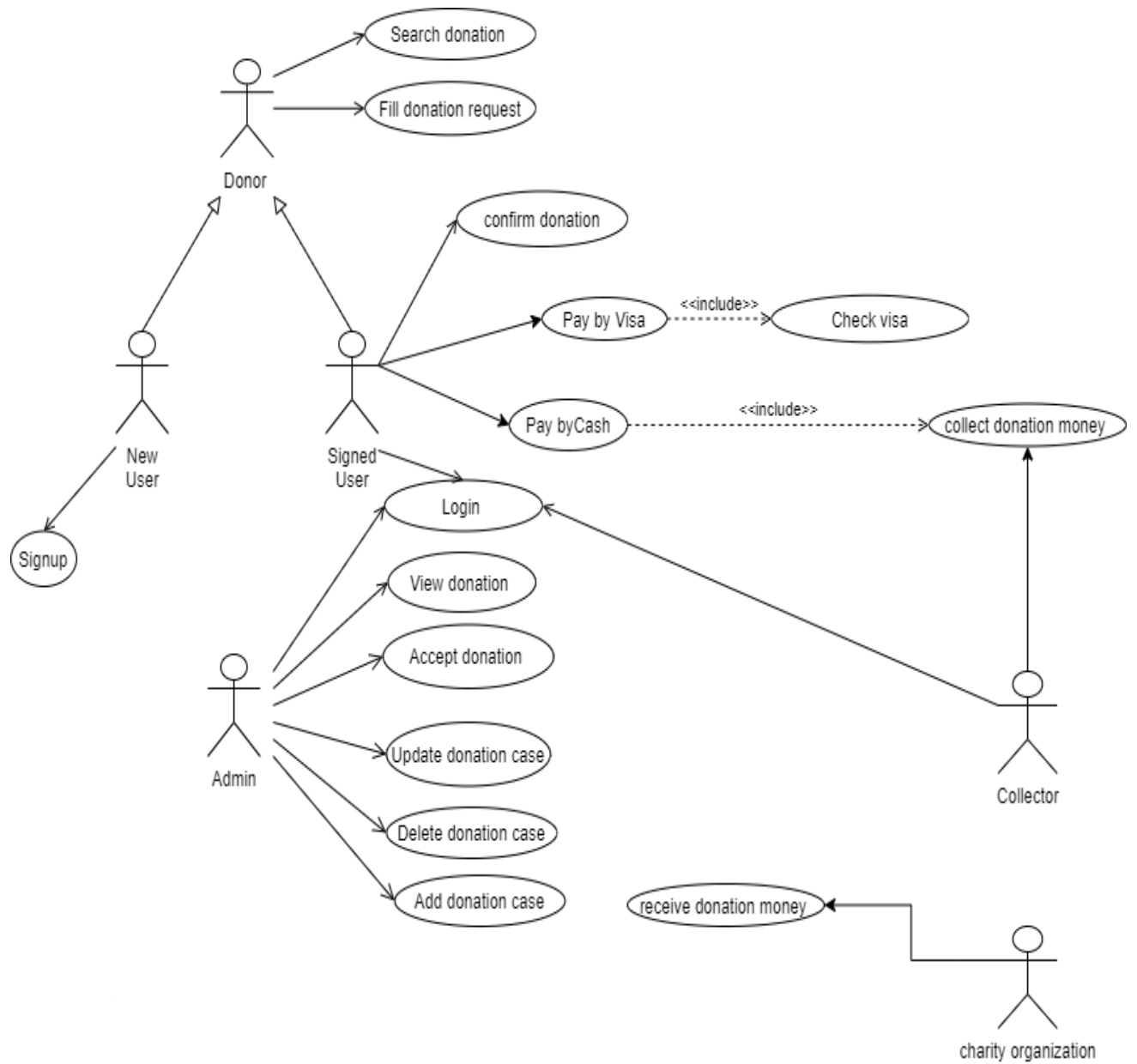
1. Project Description and Services in Details:
   ## Charity organization system:

A charity management system is a specialized software designed for organizations to automate the process of managing their donor relations as donor can be aware of the donation cases and be an effective part of providing them by their needs and lightening their burdens and that without any benefits and that by providing the following services to people who want to be part of this selfless mission:

1. Any Donor can unsigned user who can sign up and be an official member, search donation types and fill donation request
2. Signed user has the ability to complete the process of donation and get notifications about it
3. System provides two ways of payment to donor, he/she can pay by visa in the system or by cash by deliver the money to the collector.
4. System delivers the money to charity organization.
5. Admin and collector have a role to do in donation process but they can sign in to the system as a donor.

2. Use Case Diagram

3. DFD Diagrams
3.1. Context Diagram

3.2. Level 0 Diagram

3.3. Level 1 Diagram

4. Class Diagram

Signed User

New User

LogIn Form
LogIn()

SignUp
SignUp()

Search
Search()

LogIn/SignUp Controller
SendData()

Search
FindDonationType()

Donor
- UserName : String
- Email : String
- Password : String
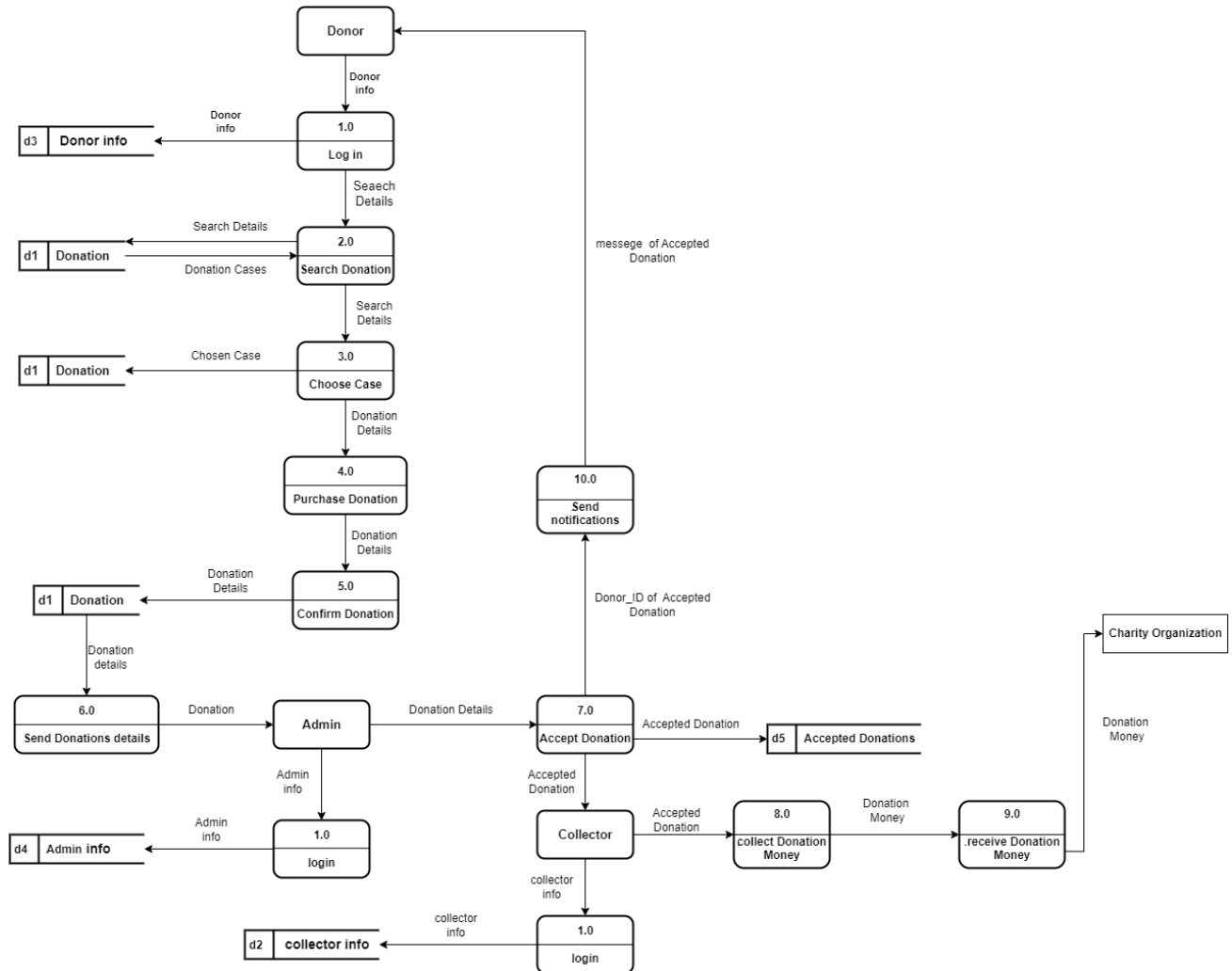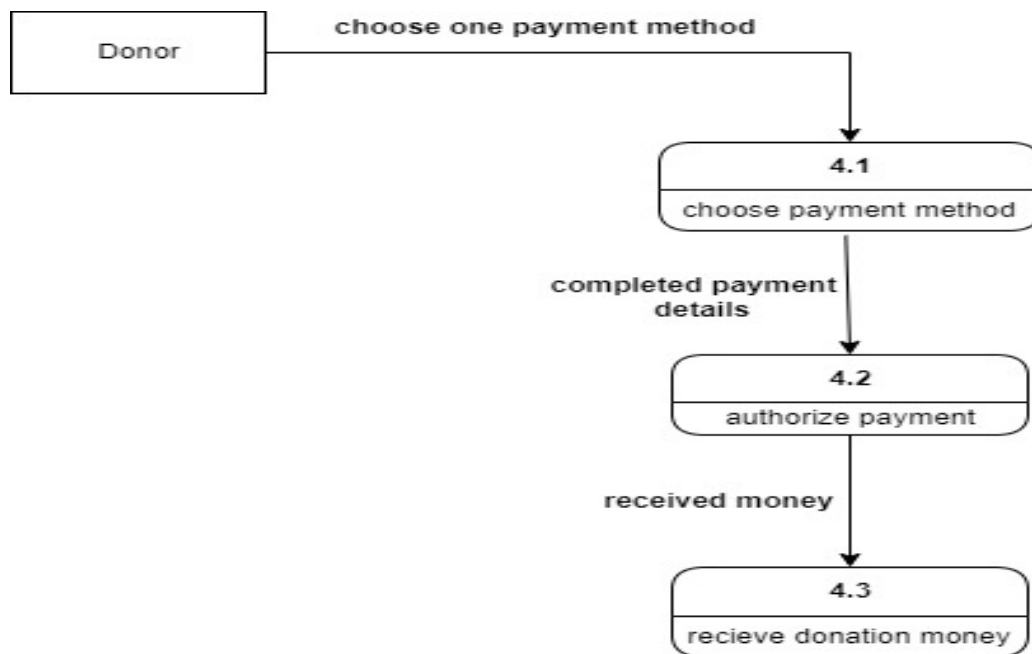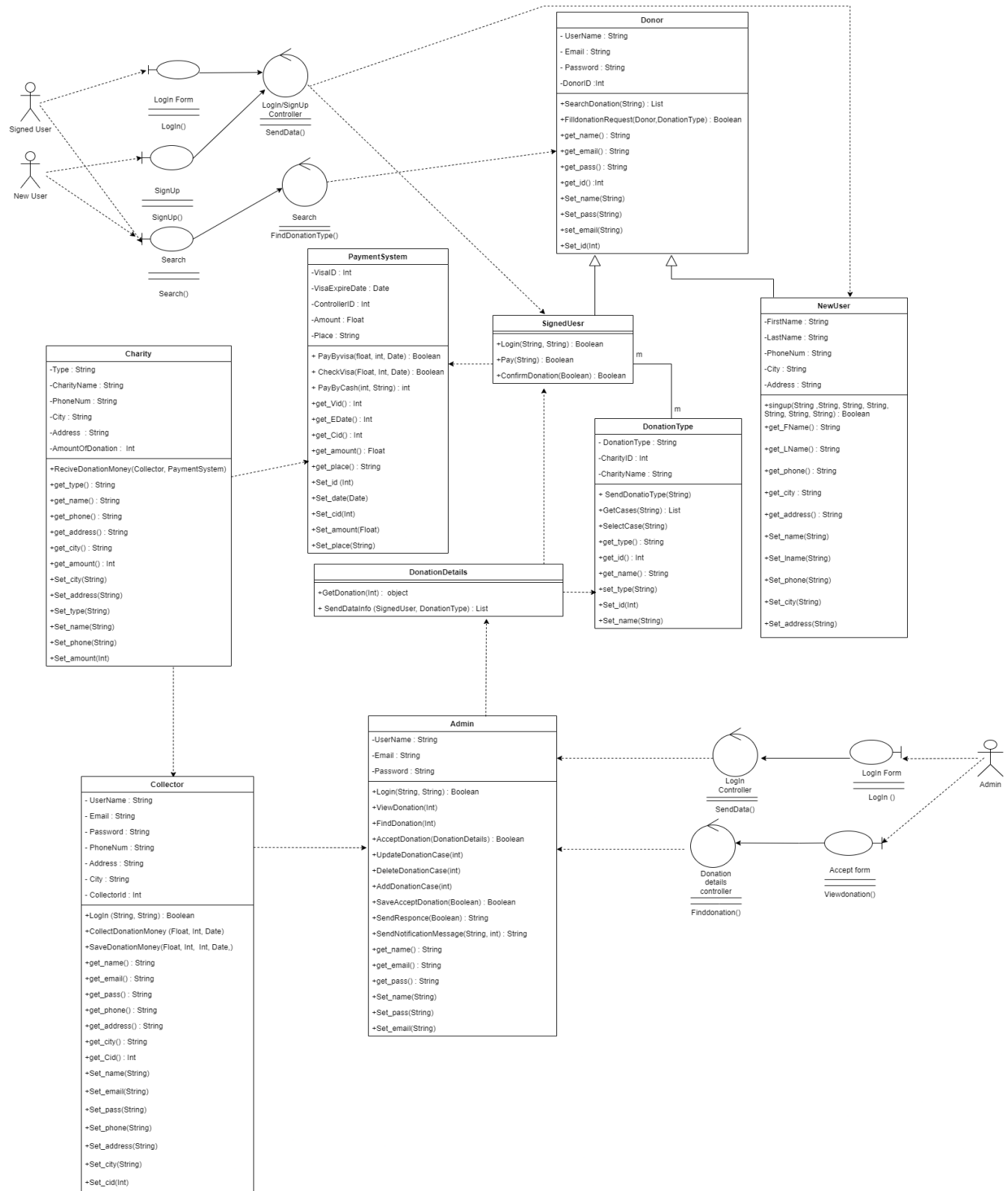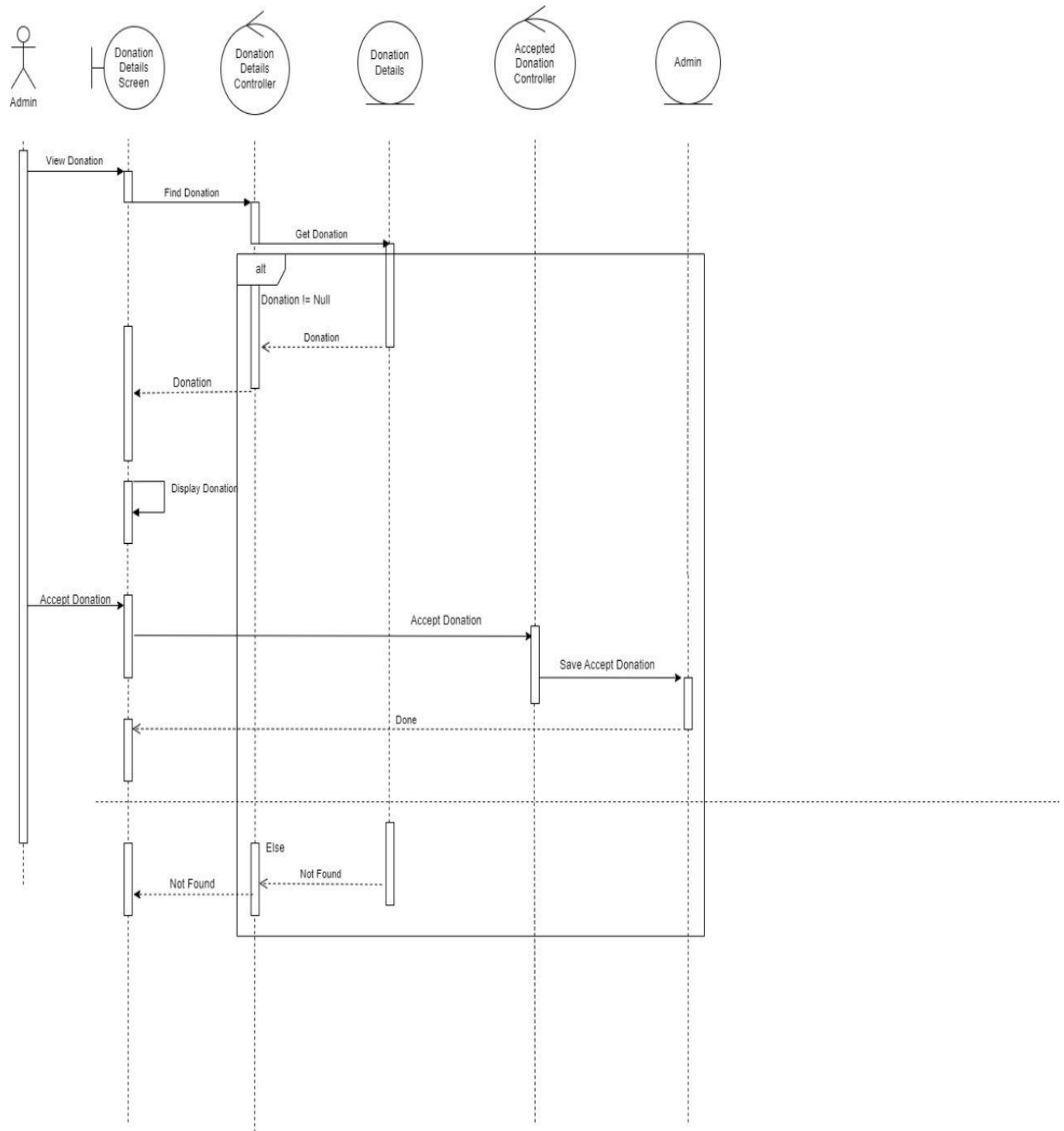-DonorID :Int

+SearchDonation(String) : List
+FilldonationRequest(Donor,DonationType) : Boolean
+get_name() : String
+get_email() : String
+get_pass() : String
+get_id() :Int
+Set_name(String)
+Set_pass(String)
+set_email(String)
+Set_id(Int)

NewUser
-FirstName : String
-LastName : String
-PhoneNum : String
-City : String
-Address : String

+singup(String ,String, String, String, String, String, String) : Boolean
+get_FName() : String
+get_LName() : String
+get_phone() : String
+get_city : String
+get_address() : String
+Set_name(String)
+Set_lname(String)
+Set_phone(String)
+Set_city(String)
+Set_address(String)

PaymentSystem
-VisaID : Int
-VisaExpireDate : Date
-ControllerID : Int
-Amount : Float
-Place : String

+ PayByvisa(float, int, Date) : Boolean
+ CheckVisa(Float, Int, Date) : Boolean
+ PayByCash(int, String) : int
+get_Vid() : Int
+get_EDate() : Int
+get_Cid() : Int
+get_amount() : Float
+get_place() : String
+Set_id (Int)
+Set_date(Date)
+Set_cid(Int)
+Set_amount(Float)
+Set_place(String)

SignedUesr
+Login(String, String) : Boolean
+Pay(String) : Boolean
+ConfirmDonation(Boolean) : Boolean

Charity
-Type : String
-CharityName : String
-PhoneNum : String
-City : String
-Address : String
-AmountOfDonation : Int

+ReciveDonationMoney(Collector, PaymentSystem)
+get_type() : String
+get_name() : String
+get_phone() : String
+get_address() : String
+get_city() : String
+get_amount() : Int
+Set_city(String)
+Set_address(String)
+Set_type(String)
+Set_name(String)
+Set_phone(String)
+Set_amount(Int)

DonationType
- DonationType : String
-CharityID : Int
-CharityName : String

+ SendDonatioType(String)
+GetCases(String) : List
+SelectCase(String)
+get_type() : String
+get_id() : Int
+get_name() : String
+set_type(String)
+Set_id(Int)
+Set_name(String)

DonationDetails
+GetDonation(Int) : object
+ SendDataInfo (SignedUser, DonationType) : List

Admin
-UserName : String
-Email : String
-Password : String

+Login(String, String) : Boolean
+ViewDonation(Int)
+FindDonation(Int)
+AcceptDonation(DonationDetails) : Boolean
+UpdateDonationCase(int)
+DeleteDonationCase(int)
+AddDonationCase(int)
+SaveAcceptDonation(Boolean) : Boolean
+SendResponce(Boolean) : String
+SendNotificationMessage(String, int) : String
+get_name() : String
+get_email() : String
+get_pass() : String
+Set_name(String)
+Set_pass(String)
+Set_email(String)

Collector
- UserName : String
- Email : String
- Password : String
- PhoneNum : String
- Address : String
- City : String
- CollectorId : Int

+LogIn (String, String) : Boolean
+CollectDonationMoney (Float, Int, Date)
+SaveDonationMoney(Float, Int, Int, Date,)
+get_name() : String
+get_email() : String
+get_pass() : String
+get_phone() : String
+get_address() : String
+get_city() : String
+get_Cid() : Int
+Set_name(String)
+Set_email(String)
+Set_pass(String)
+Set_phone(String)
+Set_address(String)
+Set_city(String)
+Set_cid(Int)

LogIn Controller
SendData()

LogIn Form
LogIn ()

Admin

Donation details controller
Finddonation()

Accept form
Viewdonation()

5. Sequence Diagrams

5.1. (accept donation)

5.2. (Search donation)