System Analysis and Design

ONLINE BLOOD BANK MANAGEMENT SYSTEM
CS-35
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1.Project Description and Services in Details:

This project represents a system for an online blood bank , which can used by user.

User can :

- Register : create Account.
- Login.
- Modify his Information.

User has three children (All children can act as user):

a) Patient :

which can:

- Search Donors : by typing his requirements e.g.(blood type ,city),then he finds a list of donors that meet the requirements.
- Request Service : by choosing his suitable donor and request his information.
- View Donor Info : when the required donor accepts to view his information , patient can directly access all of his information.
- Get Life Saving Contacts : View Life Saving Contact in case he didn't find his requirements , or donor refused to share his information.

b) Donor :

which only can :
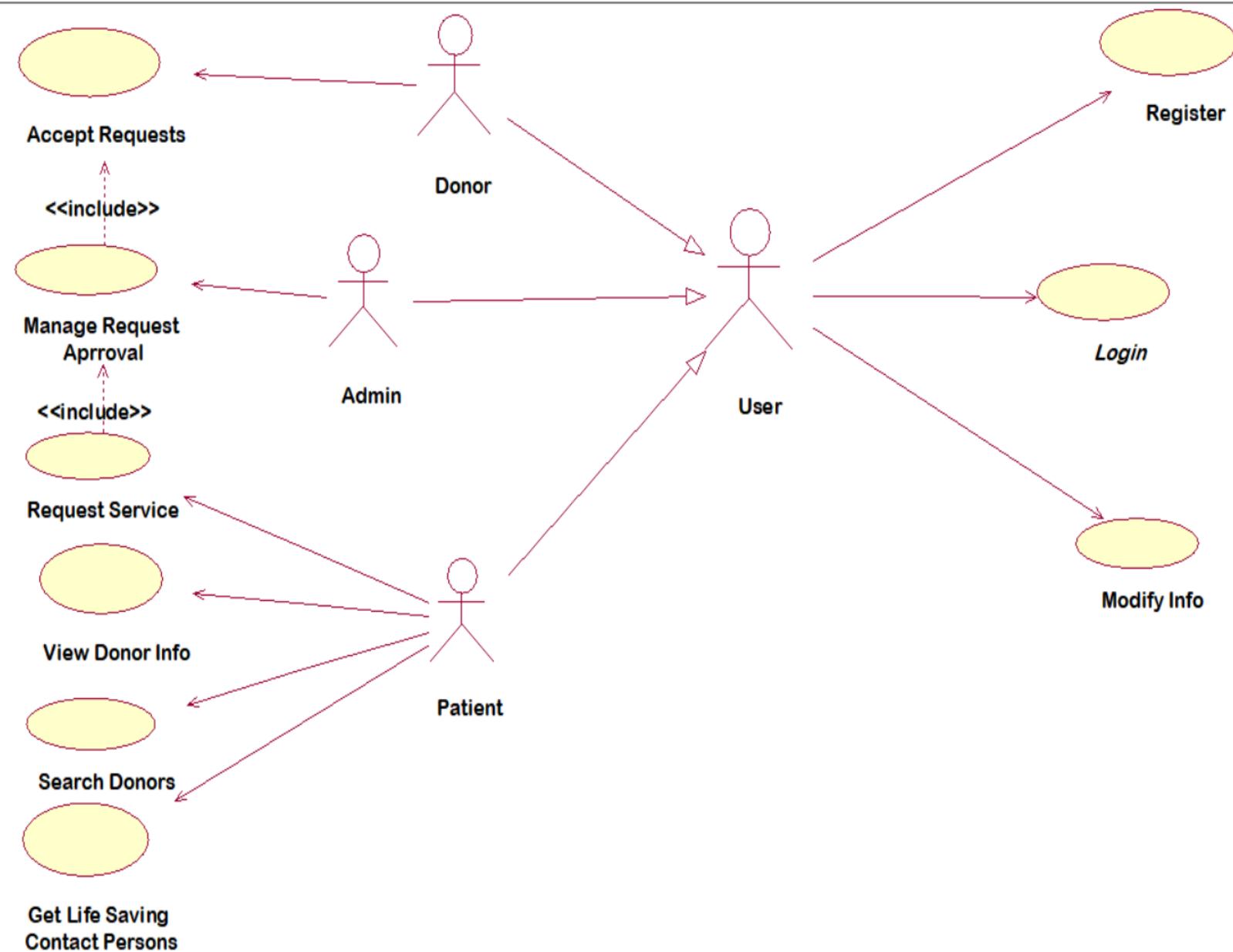
- Accept Requests : Accept requests for viewing his information or refuse.

c) Admin :

which is responsible for:
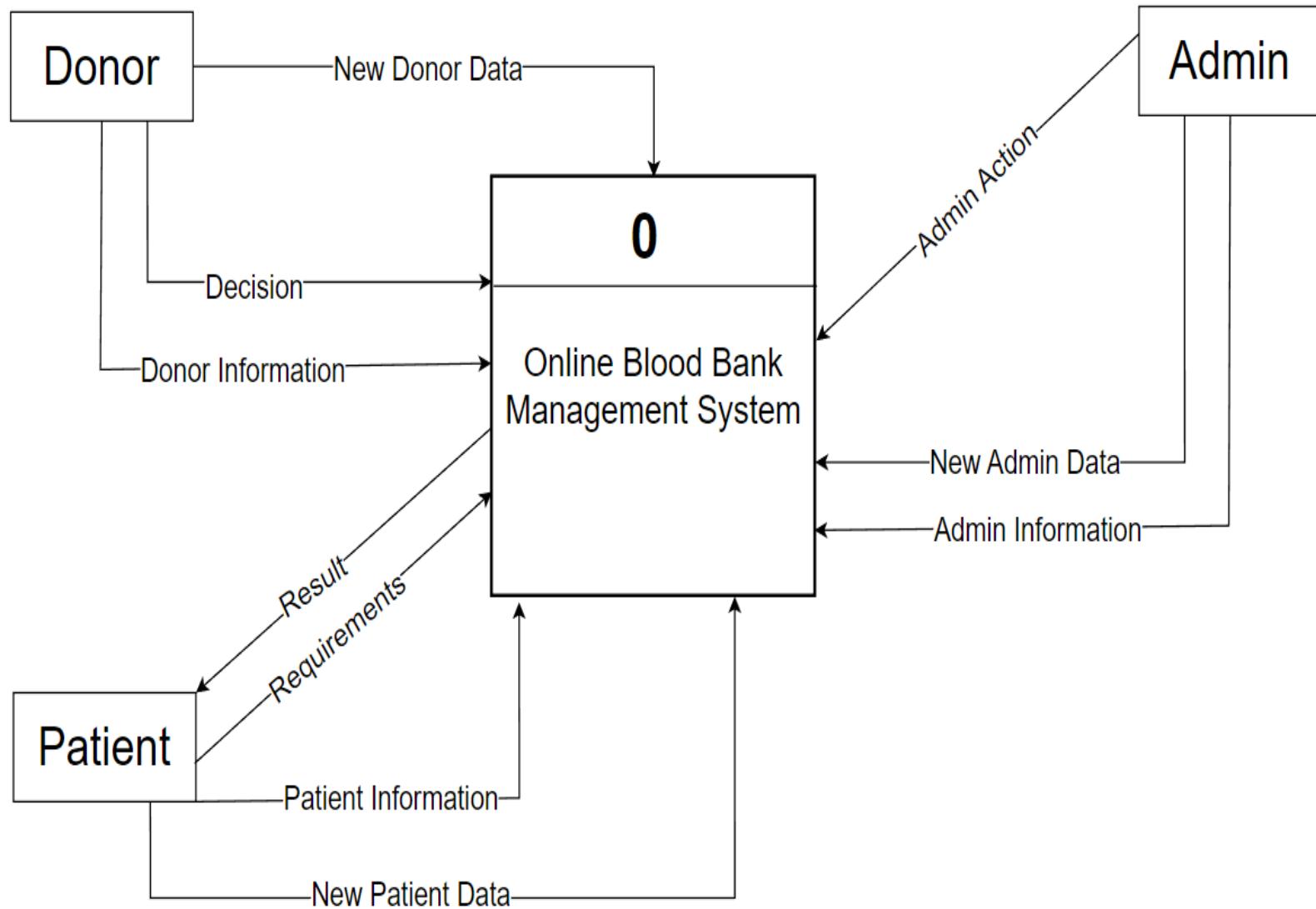
- Manage Requests : between the patient and donor ,and return the Life Saving Contacts to the patient in case donor refused to view his information.

2. Use Case Diagram

Accept Requests

<<include>>

Manage Request Aprroval

<<include>>

Request Service

View Donor Info

Search Donors

Get Life Saving Contact Persons

Donor

Admin

User

Patient

Register

Login

Modify Info
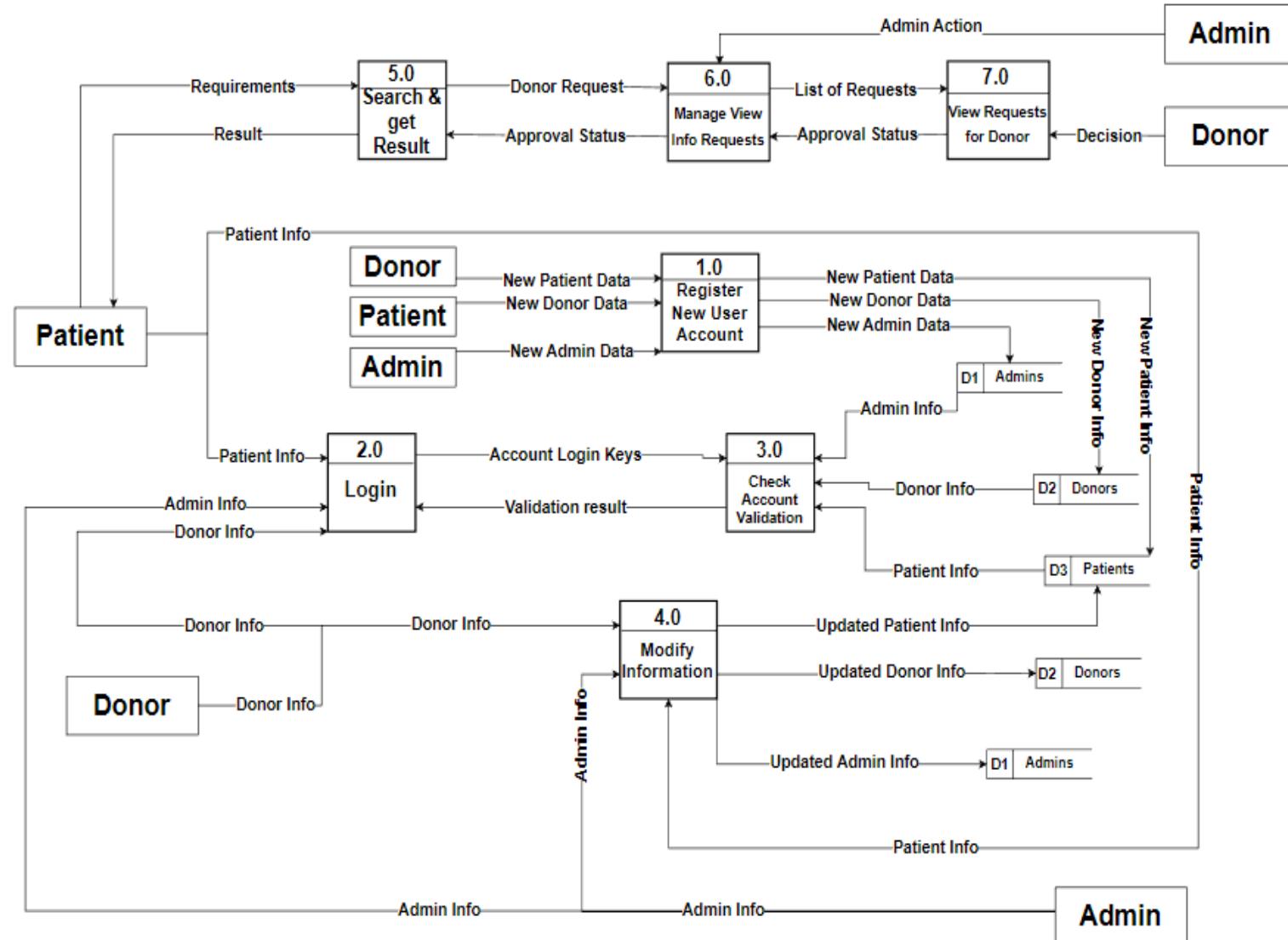
3. DFD Diagrams
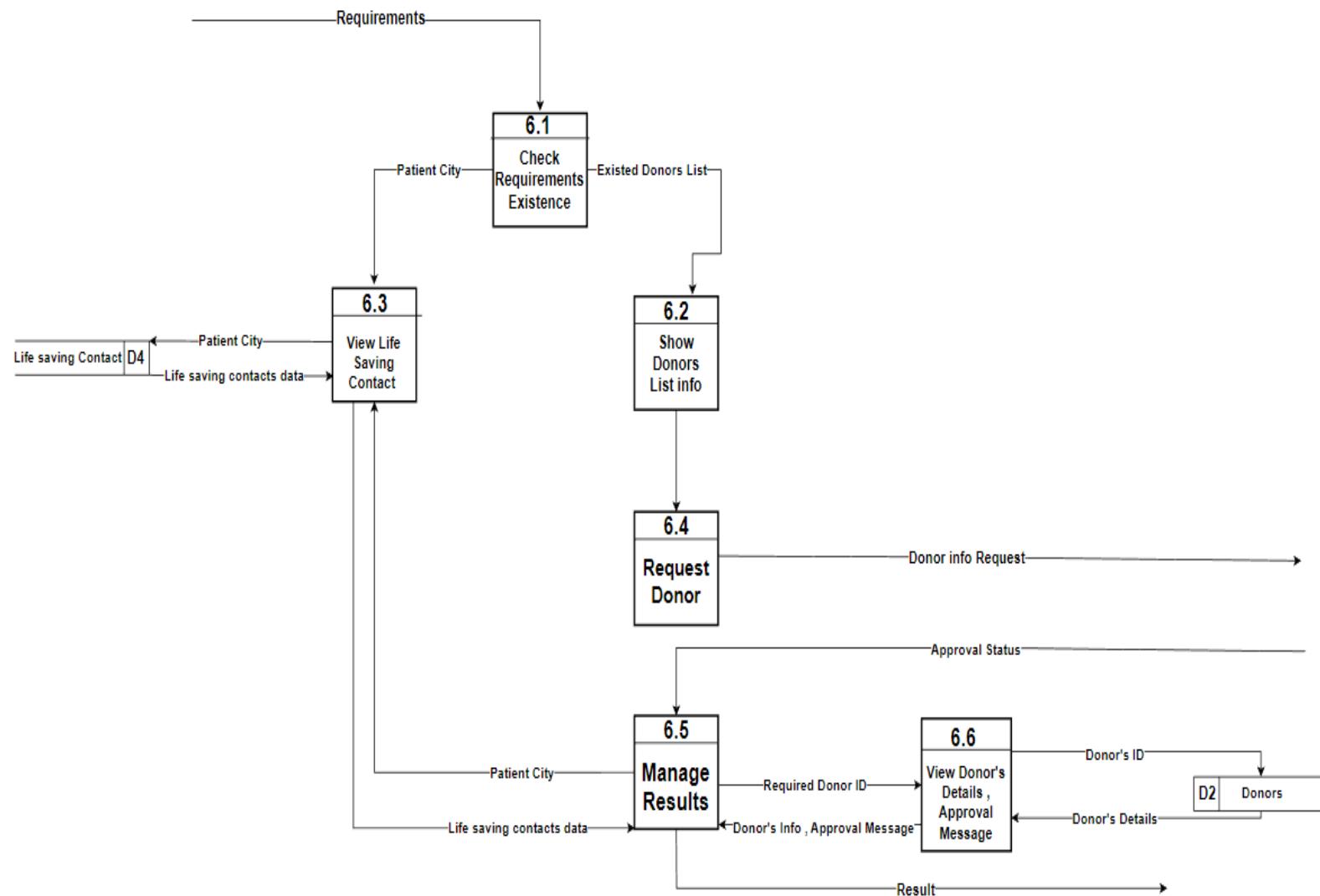
3.1. Context Diagram
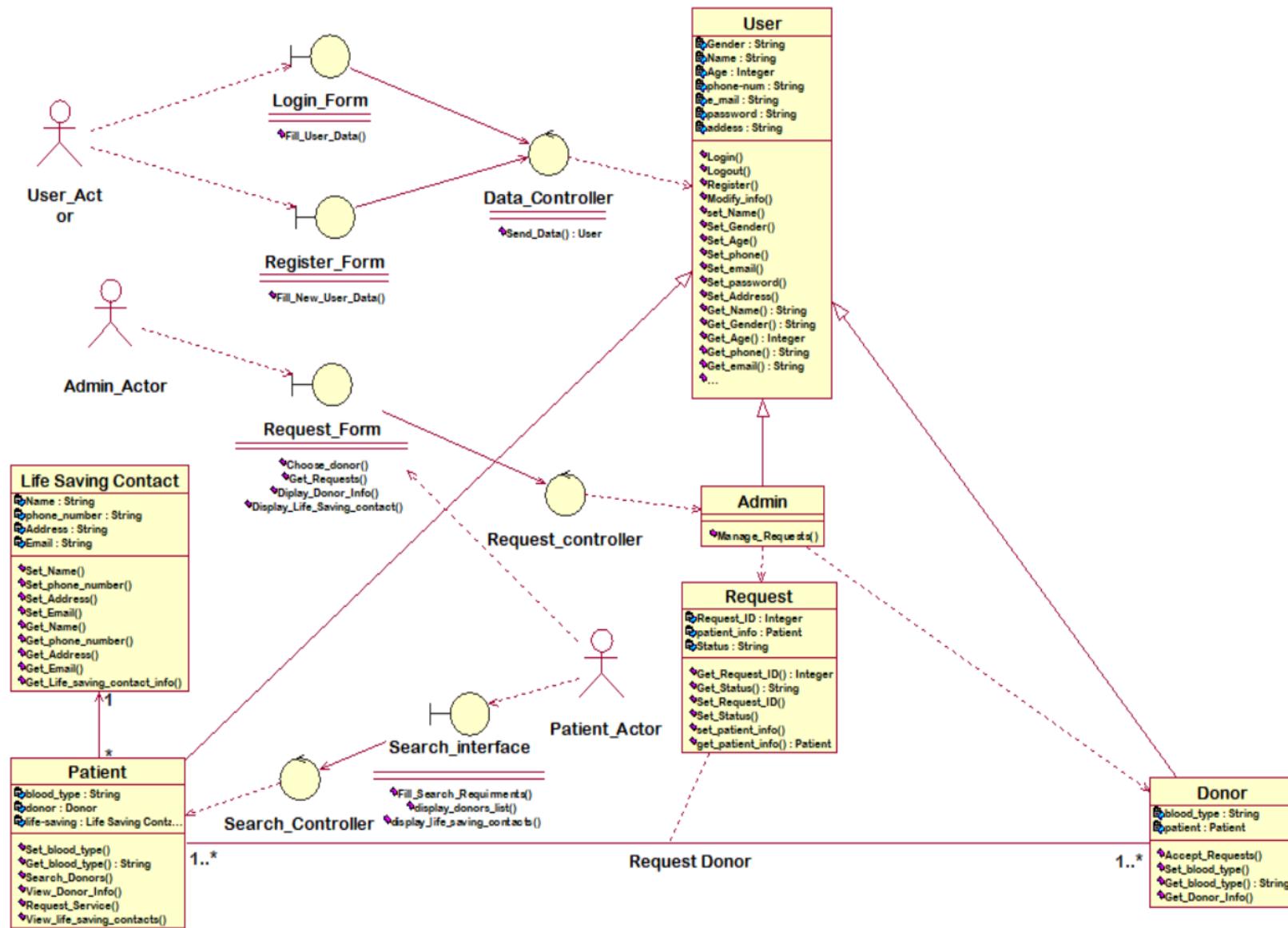
3.2.   Level 0 Diagram

3.3. Level 1 Diagram

4. Class Diagram

User
- Gender : String
- Name : String
- Age : Integer
- phone-num : String
- e_mail : String
- password : String
- addless : String

- Login()
- Logout()
- Register()
- Modify_info()
- set_Name()
- Set_Gender()
- Set_Age()
- Set_phone()
- Set_email()
- Set_password()
- Set_Address()
- Get_Name() : String
- Get_Gender() : String
- Get_Age() : Integer
- Get_phone() : String
- Get_email() : String
- ...

Login_Form
- Fill_User_Data()

Register_Form
- Fill_New_User_Data()

Data_Controller
- Send_Data() : User

Request_Form
- Choose_donor()
- Get_Requests()
- Diplay_Donor_Info()
- Display_Life_Saving_contact()

Life Saving Contact
- Name : String
- phone_number : String
- Address : String
- Email : String

- Set_Name()
- Set_phone_number()
- Set_Address()
- Set_Email()
- Get_Name()
- Get_phone_number()
- Get_Address()
- Get_Email()
- Get_Life_saving_contact_info()

Request_controller

Admin
- Manage_Requests()

Request
- Request_ID : Integer
- patient_info : Patient
- Status : String

- Get_Request_ID() : Integer
- Get_Status() : String
- Set_Request_ID()
- Set_Status()
- set_patient_info()
- get_patient_info() : Patient

Search_interface
- Fill_Search_Requirements()
- display_donors_list()
- display_life_saving_contacts()

Patient
- blood_type : String
- donor : Donor
- life-saving : Life Saving Conta...

- Set_blood_type()
- Get_blood_type() : String
- Search_Donors()
- View_Donor_Info()
- Request_Service()
- View_life_saving_contacts()

Search_Controller

Donor
- blood_type : String
- patient : Patient

- Accept_Requests()
- Set_blood_type()
- Get_blood_type() : String
- Get_Donor_Info()

User_Act or

Admin_Actor

Patient_Actor

Request Donor

1..*   1..*

1   *

## 5. Sequence Diagrams

5.1. Search Donors

5.2. Manage Request Approval