Jaypee Institute of Information Technology , Noida - 62

Synopsis - B11

Online Blood Bank Recording System

TEAM MEMBERS :-

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ABSTRACT

This project is aimed to developing an online Blood Donation Information. The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The Blood Donation Agent is to create an e-Information about the donor and organization that are related to donating the blood. Through this application any person who is interested in donating the blood can register himself in the same way if any organization wants to register itself with this site that can also register. Moreover if any general consumer wants to make request blood online he can also take the help of this site. Admin is the main authority who can do addition, deletion, and modification if required.

The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned. Using the constructs of MS-SQL Server and all the user interfaces have been designed using the ASP.Net technologies. The database connectivity is planned using the "SQL Connection" methodology. The standards of security and data protective mechanism have been given a big choice for proper usage. The application takes care of different modules and their associated reports, which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff.
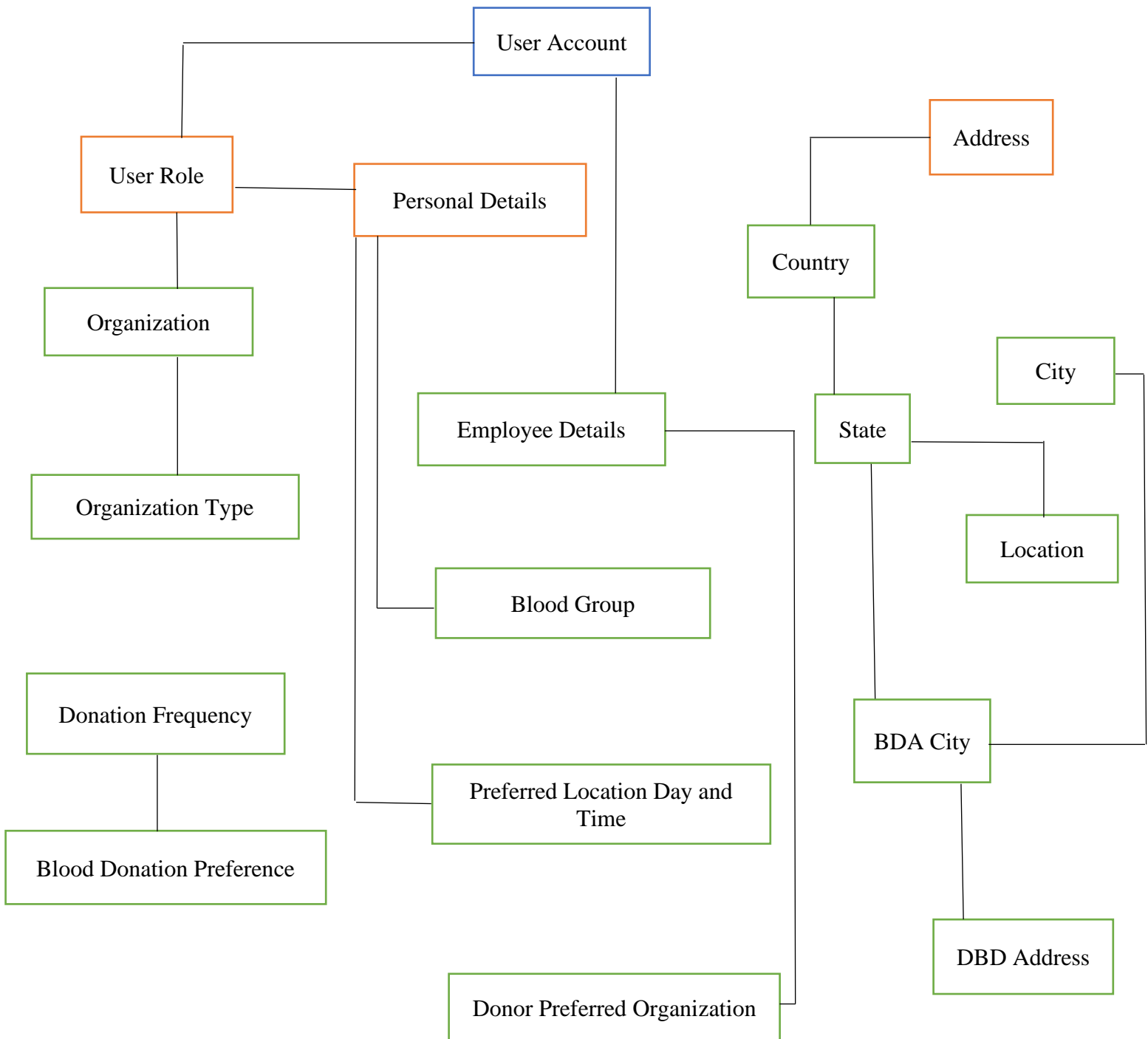
The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The specification has been normalized up to 3NF to eliminate all the anomalies that may arise due to the database transaction that are executed by the general users and the organizational administration. The user interfaces are browser specific to give distributed accessibility for the overall system. The internal database has been selected as MS-SQL server 2000.The basic constructs of table spaces, clusters and indexes have been exploited to provide higher consistency and reliability for the data storage. The MS-SQL server 2000 was a choice as it provides the constructs of high-level reliability and security. The total front end was dominated using the ASP.Net technologies. At all proper levels high care was taken to check that the system manages the data consistency with proper business rules or validations. The database

connectivity was planned using the latest "SQL Connection" technology provided by Microsoft Corporation. The authentication and authorization was crosschecked at all the relevant stages. The user level accessibility has been restricted into two zones namely.
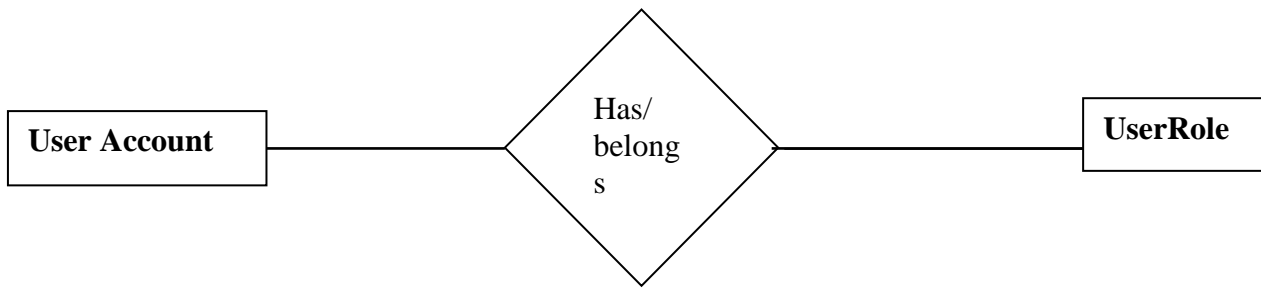
PROJECT OVERVIEW

The Blood Donation Agent is to create an e-Information about the donor and organization that are related to donating the blood. Through this application any person who is interested in donating the blood can register himself in the same way if any organization wants to register itself with this site that can also register. Moreover if any general consumer wants to make request blood online he can also take the help of this site. Admin is the main authority who can do addition, deletion, and modification if required.

ER DIAGRAMS

User Account

User Role

Personal Details

Address

Country

Organization

Employee Details

City

State

Organization Type

Location

Blood Group

Donation Frequency

BDA City

Preferred Location Day and Time

Blood Donation Preference

DBD Address

Donor Preferred Organization

ER diagram for User Account and Users

| Has/ belongs s |

| User Account |

| UserRole |

UserAccount
AccountID
Username
Password
UserDesc
HintQuestion
Answer
RoleID

UserRole
RoleID
RoleName
RoleDesc
Active

ER diagram for User Account and Organisation

Has/belongs

User Account
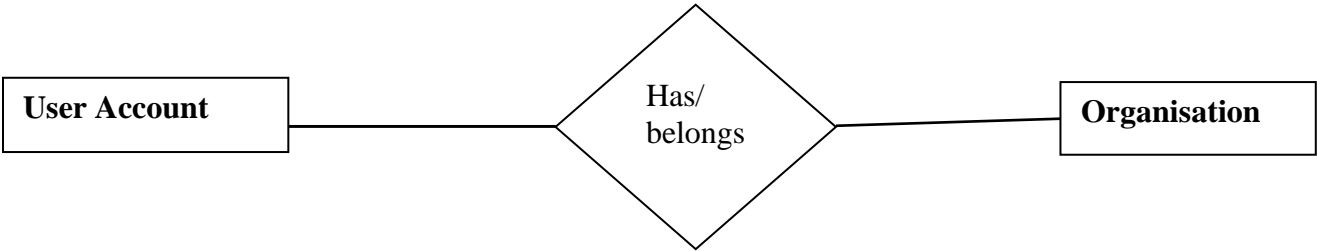
Organisation

UserAccount
AccountID
Username
Password
UserDesc
Hint Question
Answer
RoleID

Organisation
OrgID
OrgName
OrgType
Email
OrgAddrID
OrgImageURL
OrgDescription
ContactNo
MobileNo
Active
Comment

ER diagram for Users Account and Personal Details

| User Account | | Has/ belong | | Personal details |
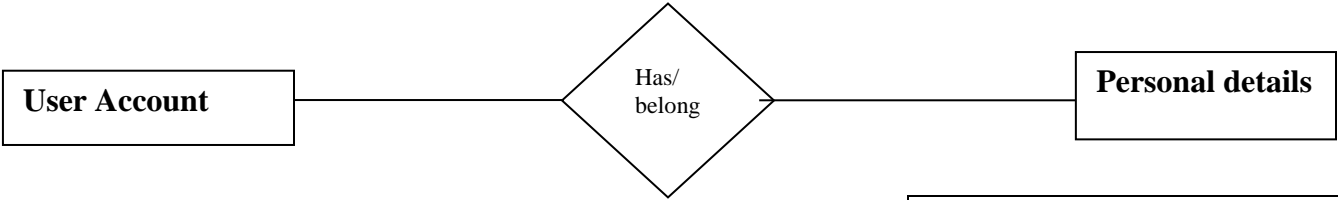
UserAccount

UserAccount
AccountID
Username
Password
UserDesc
HintQuestion
Answer
RoleID

Personal Details
First Name
Email
DOB
Weight
Gender
ImageURL
BloodGroupID
BloodType
BloodType
AddressID
ContactNo_Office
ContactNo_Residence
MobileNo
Active
MiddleName

ER diagram for User Account and Employee Details
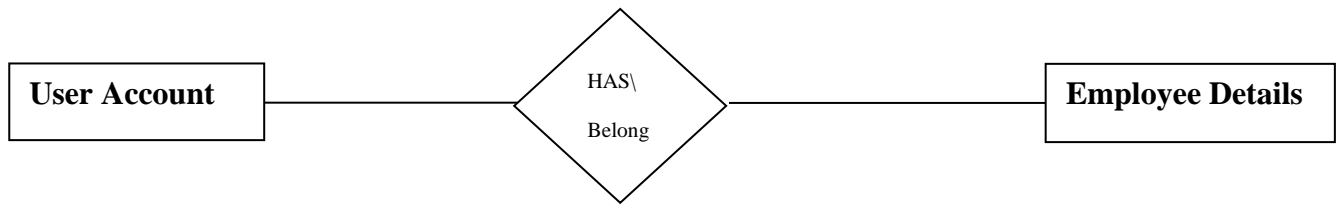
User Account
AccountID
Username
Password
User Desc
Hint Question
Answer
Role ID

User Account — HAS\ Belong — **Employee Details**

Employee Details
Emp Id
Name
Address
Phone
Email
Active

ER diagram for User Role and Blood User account

UserRole

Has/
belong
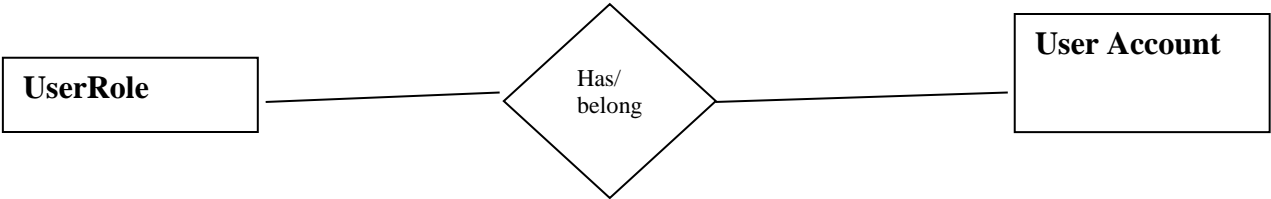
User Account

UserRole
RoleID
RoleName
RoleDesc
Active

User Account
AccountID
Username
Password
User Desc
Hint Question
Answer
Role ID

Diagram for State and BDA City

| State |——⟨ Has/ belong ⟩——| BDAcity |
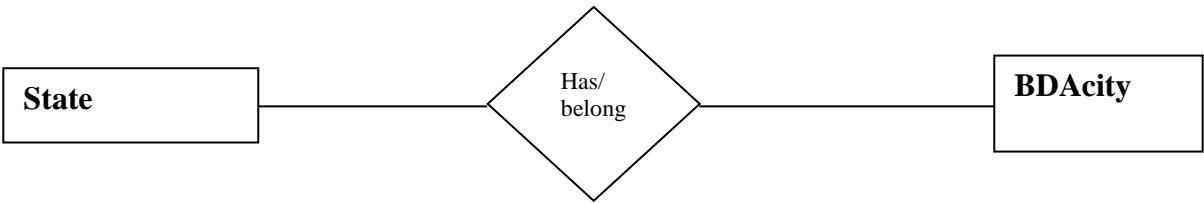
BDAState

| StateID |
| StateName |
| StateCode |
| StateDesc |
| CountryID |
| Active |

BDACity

| CityID |
| CityName |
| CityDesc |
| CityCode |
| StateID |
| Active |

ER diagram for State and Address

State	Has/ belong	Address
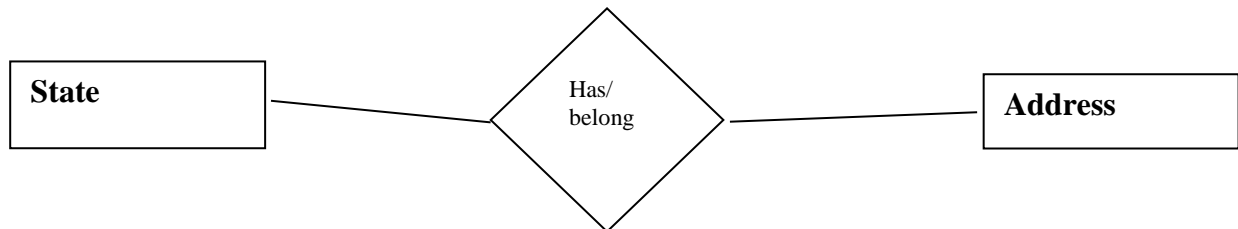
BDAState

StateID
StateName
StateCode
StateDesc
CountryID
Active

dBDA_Address

AddressID
AddressLine1
LocationID
CityID
StateID
CountryID
CountryID
Zipcode
Active

ER diagram for State and Country

| State | | Has/belong | | Country |
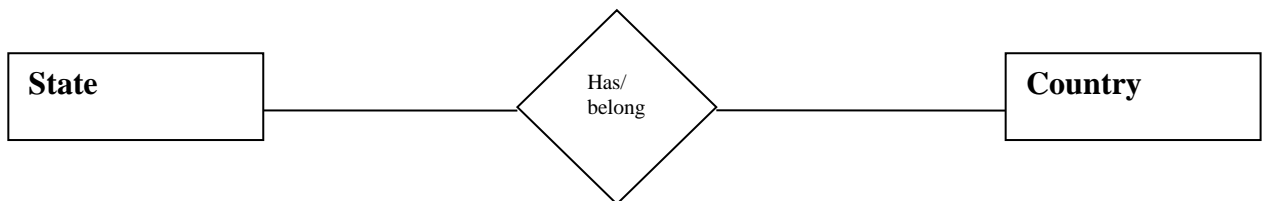
BDAState

StateID

StateName

StateCode

StateDesc

CountryID

Active

Country
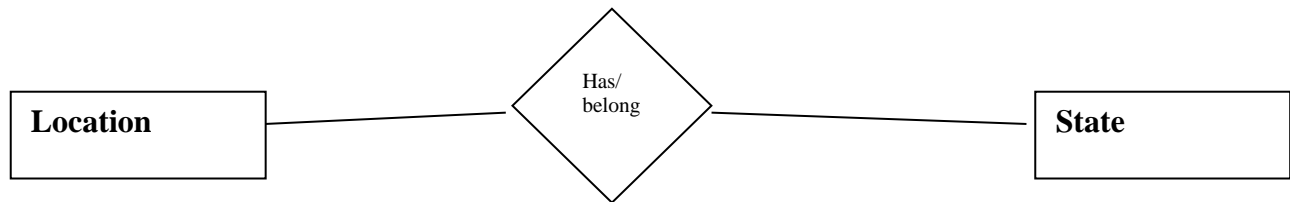
CountryID

CountryName

CountryDesc

CountryCode

Active

ER diagram for Location and City

Location —— Has/belong —— **State**

BDALocation
LocationID
LocationName
LocationDesc
LocationCode
CityID
Pin code
Active

BDAState
StateID
StateName
StateCode
StateDesc
CountryID
Active

ER diagram for Location and City
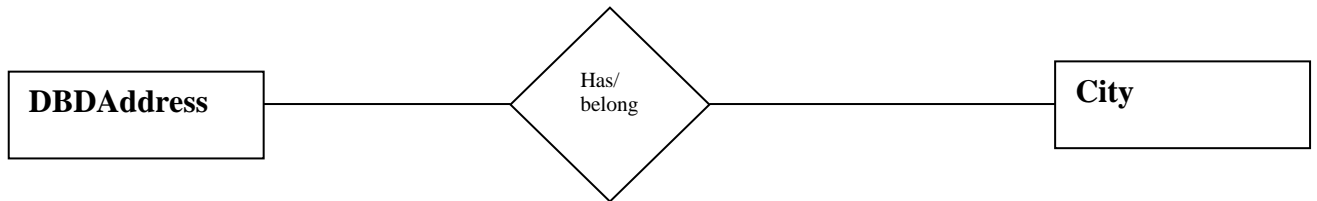
DBDAddress		Has/ belong		City

dBDA_Address
AddressID
AddressLine1
LocationID
CityID
StateID
CountryID
CountryID
Zipcode
Active

BDACity
CityID
CityName
CityDesc
CityCode
StateID
Active

ER diagram for Location and Address
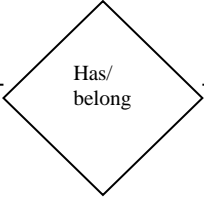
| BDALocation | | | Has/ belong | | | DBDAddress |

BDALocation
LocationID
LocationName
LocationDesc
LocationCode
CityID
Pin code
Active

DBDAAddress
AddressID
AddressLine1
LocationID
CityID
StateID
CountryID
CountryID
Zipcode
Active

ER diagram for Blood group Personal details

Blood group ——— ◇ Has/ belong ◇ ——— **Personal details**
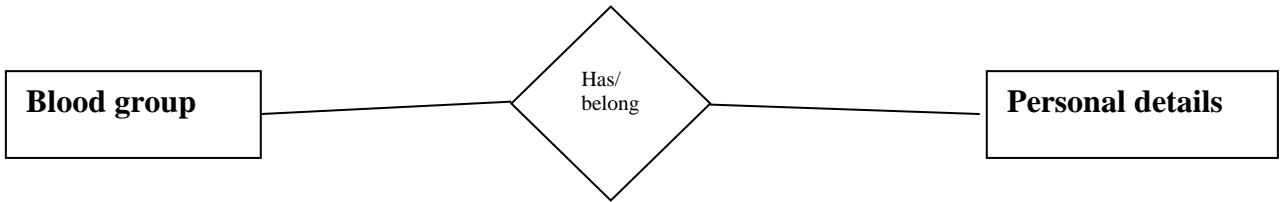
BloodGroup
BloodGroupID
BloodGroup
Description
Active

Personal details
UserAccountID
FirstName
MiddleName
LastName
Email
DOB
Weight
Gender
ImageURL
BloodGroupID
BloodType
AddressID
ContactNo_Office
ContactNo_Residence
MobileNo
Active

ER diagram for Personal details and Blood Donation preferences

Personal details — Has/belong — **Preferd location Day Time Details**

Personal details
UserAccountID
FirstName
MiddleName
LastName
Email
DOB
Weight
Gender
ImageURL
BloodGroupID
BloodType
AddressID
ContactNo_Office
ContactNo_Residence
MobileNo
Active

PreferredDonationDayTime
DonorPreferenceID
WeekDay
TimeFrom
TimeFrom
TimeUpto
UserAccountID
Comment
Active
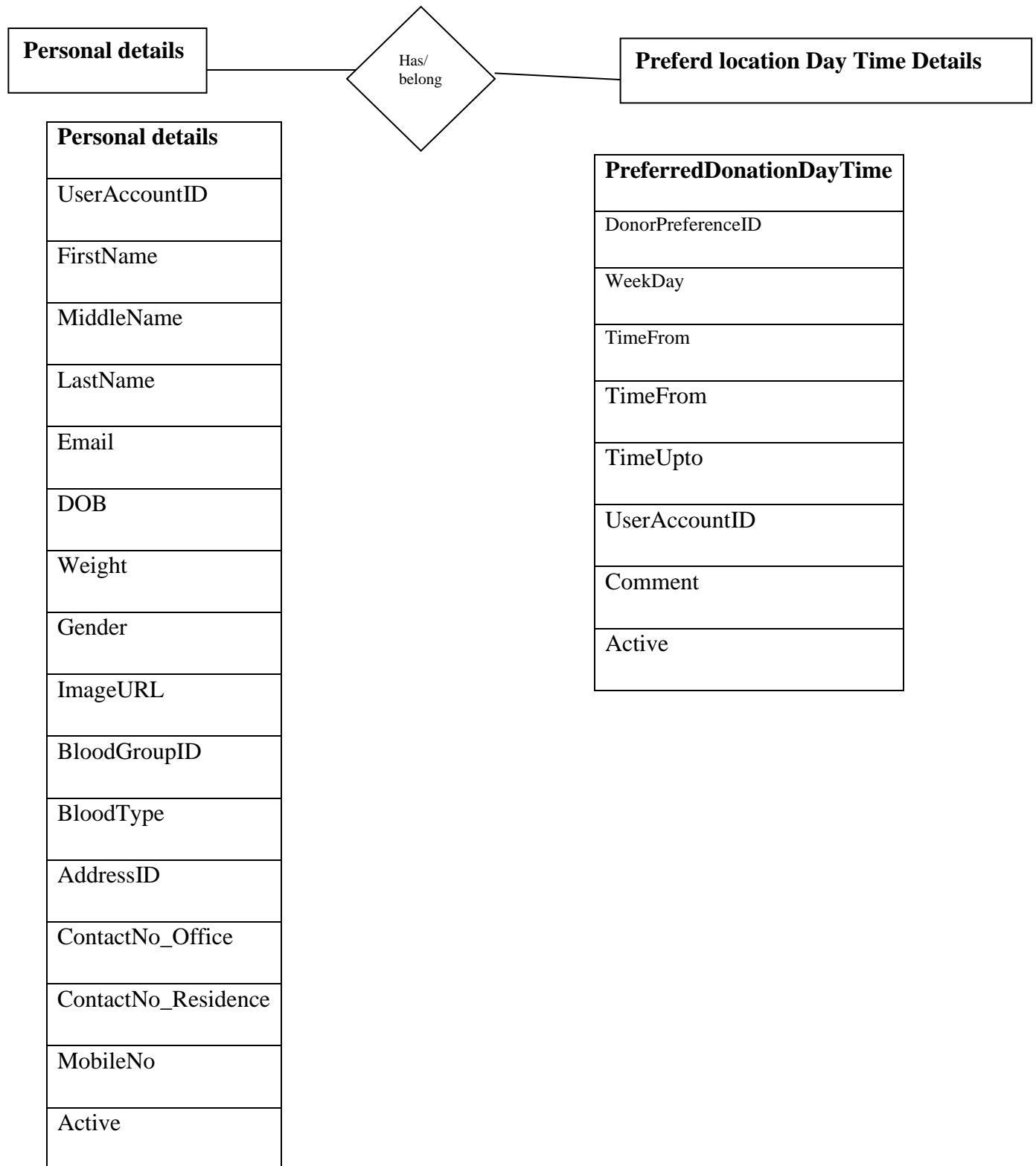
ER diagram for Donor Frequencies and Blood Donation Preferences

DonationFrequencies

Has/
belong

Blood Donation Preference

DonationFrequencies
FrequencyID
Frequency
Description
Active

BloodDonationPreference
PreferenceID
UserAccountID
DonationFrequencyID
WantToDonateWhitecells
Active
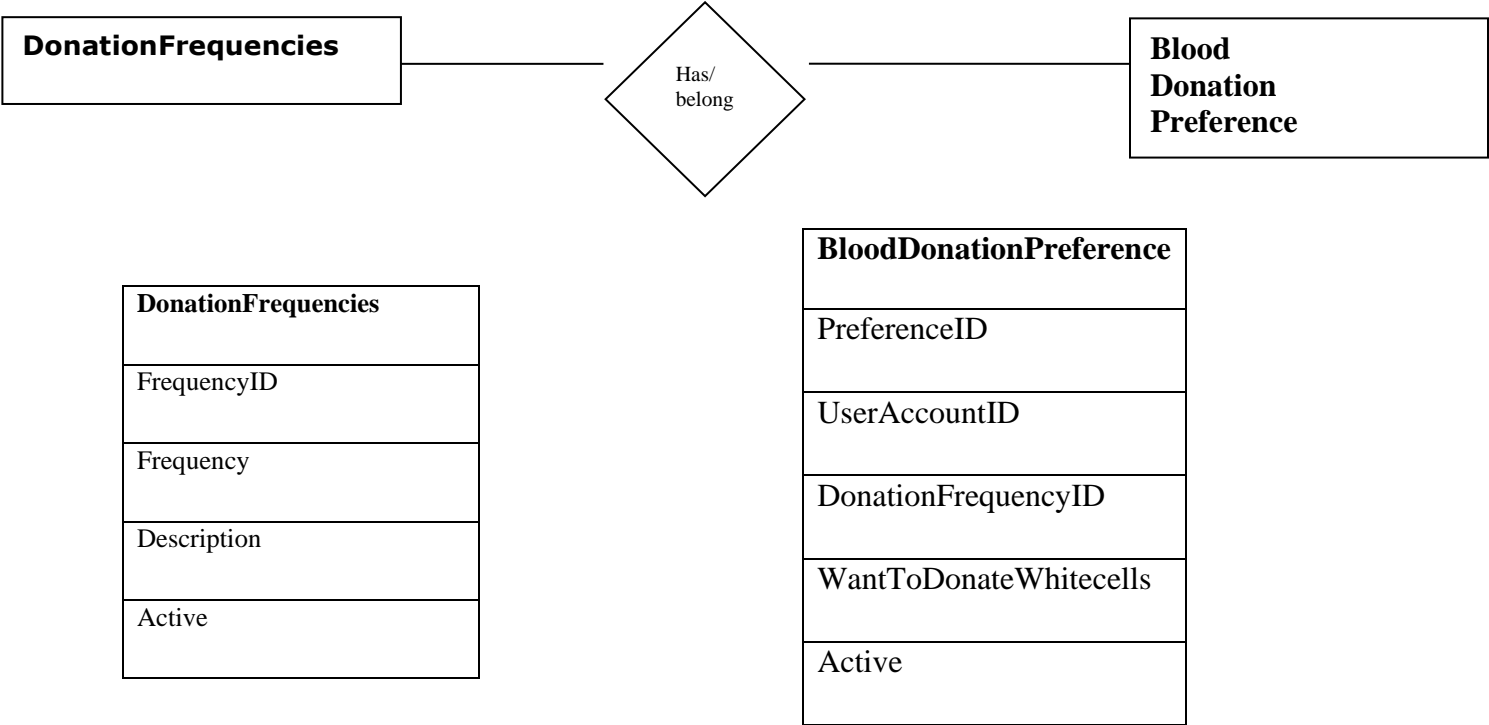
ER diagram for Donor preferred organization and personal details

| Donar preferred organization | | Has/ belong | | Persanal Details |
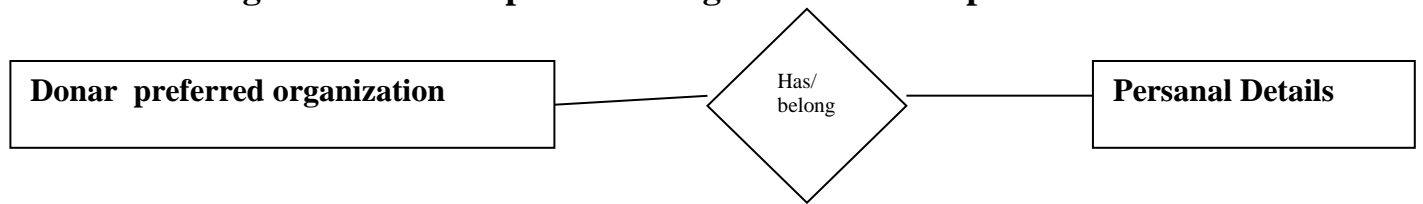
DonorPreferredOrganisation
UserAcountID
OrganisationID
Active

Personal details
UserAccountID
FirstName
MiddleName
LastName
Email
DOB
Weight
Gender
ImageURL
BloodGroupID
BloodType
AddressID
ContactNo_Office
ContactNo_Residence
MobileNo
Active

ER diagram for Organization type and Organization

Organization type ◇ Has/belong **Organization**
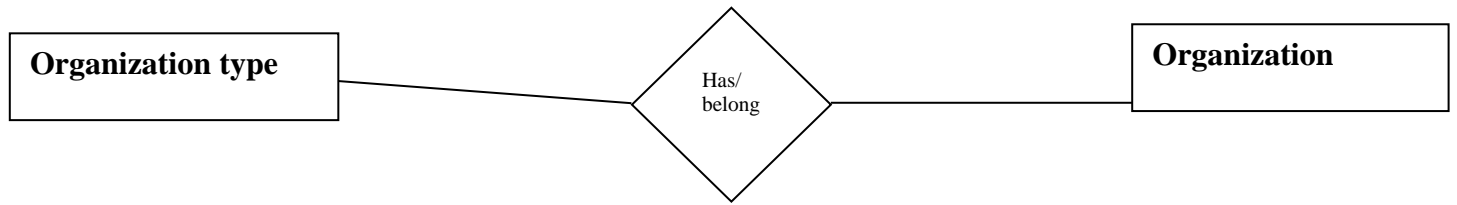
OrganisationType

TypeID
TypeName
TypeDescription
OrgImage
Active

Organisation

OrgID
OrgName
OrgType
Email
OrgAddrID
OrgImageURL
OrgDescription
ContactNo
MobileNo
Active
Comment