Online Leave Management System

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Objectives

LEAVE MANAGEMENT SYSTEM

AS EASY AS IT CAN BE

Project is aimed at developing an online application for leave management. The Leave management
system is an internet-based application that can be accessed throughout the institution used for automating
the workflow of leave application and their approvals.

Leave Management System

The software aims at helping the user to address issues from multi-disciplinary angles related to leave administration and management. Decrease the paperwork and enable the process with efficient, reliable record maintenance by using centralized database, thereby reducing chances of data loss

- Can easily be extended for further feature.
- Easy on implementation

External Entities to interact

The actors have been broadly classified into three main roles.

- Administrator
- Student (Ph.d and Normal)
- Faculty

Administrator can ..

- Choose the types of leave allowed - Sick, Annual, Family Responsibility,Maternity, Study, Unpaid, etc.
- Choose the number of days allowed for each of the types. A default is set for all the faculty and student, but admin can also modify it per employee and students.
- Leave can be allocated annually or monthly depending on the institute policies.
- Choose the persons to be notified when leave requests are received.
- Choose the approver for the leave requests.
- Assign different roles.

Faculty can..

- Can approve the leave of the student.
- Can review and comment on the documents.
- Can check the students leave history.
- Can recommend application further in the chain and give remarks.
- Easily apply for leave choosing the required leave type and amount of hours or days.
- Faculty can upload supporting documentation, such as university documents or sick notes when they apply for leave.

Student can..

- A leave summary shows the student, how many leaves are available ,how many they have taken and the status of their leave applications.
- Easily apply for leave choosing the required leave type and amount of hours or days.
- Student can upload supporting documentation, such as university documents or sick notes when they apply for leave.
- The Leave Management Software is completely secure, thus student can’t view each other’s leave statuses.
- Mess waiver application can also be sent to the concerned party.

Functionalities Provided

- Email notifications to approving authority and applicants.
- Leave records are updated automatically once applications are approved.
- Leave records may be printed out or generated into reports.
- Leave records may be exported to any back-end system.
- Choose the types of leave allowed - Sick, Annual, Family Responsibility,Maternity, Study, Unpaid, etc.
- The concerned faculty are notified on students leave.

Overview of Features

- Login
- User Registration
- Recovery Of Forgotten Password
- Profile
- Apply For Leave
- Approve or Reject Application
- Notification
- Leave History
- Set Permissions

Technology Stack

Database - MySql
Application Server - Nginx, Django v3.0
Open Source tools - VueJS, Ajax, Bootstrap
Operating System(Server Side) - Linux
Browser Support - Google Chrome and Mozilla Firefox

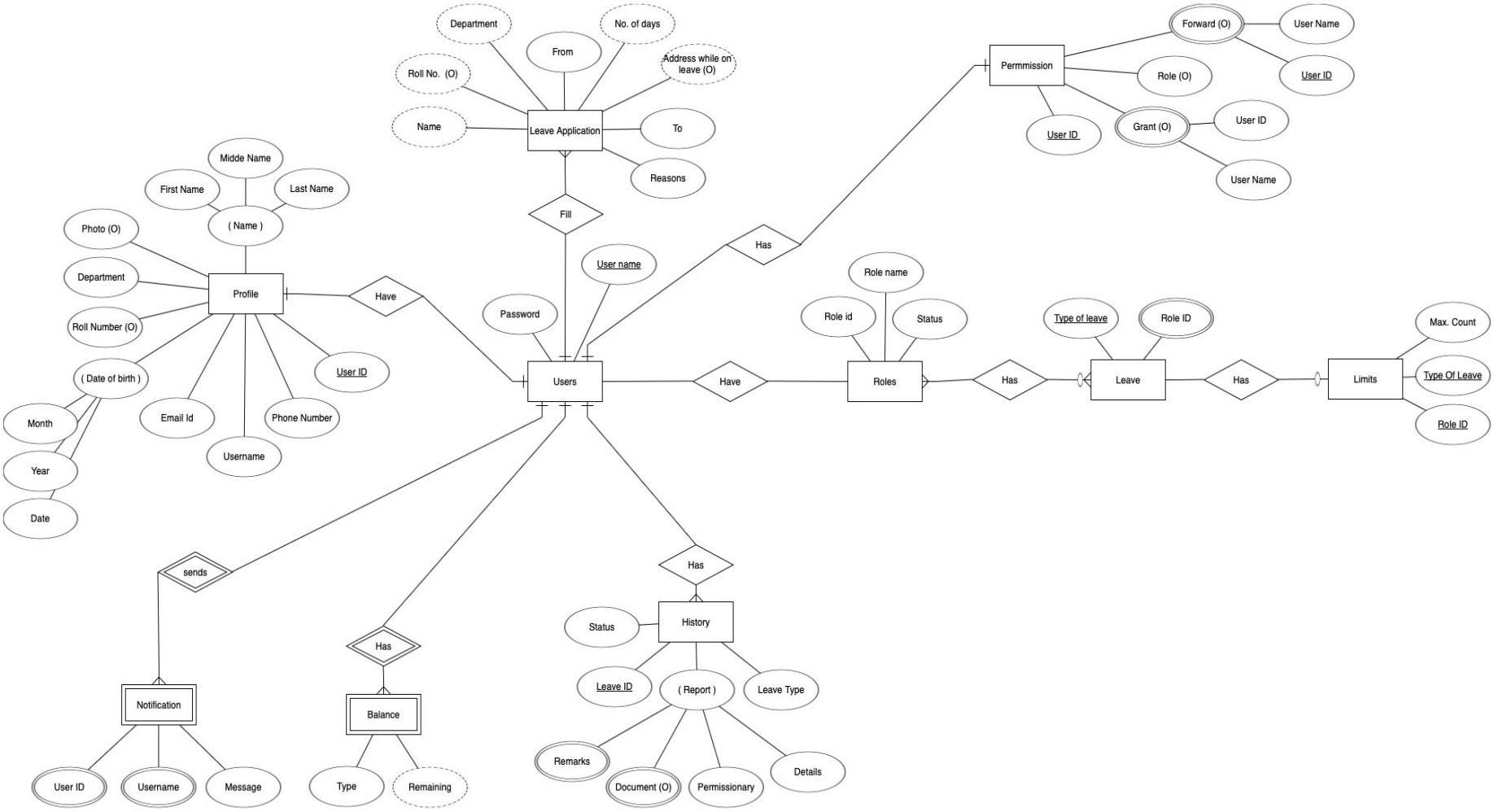
Future Goals

Develop a console for accessing the leave portal.

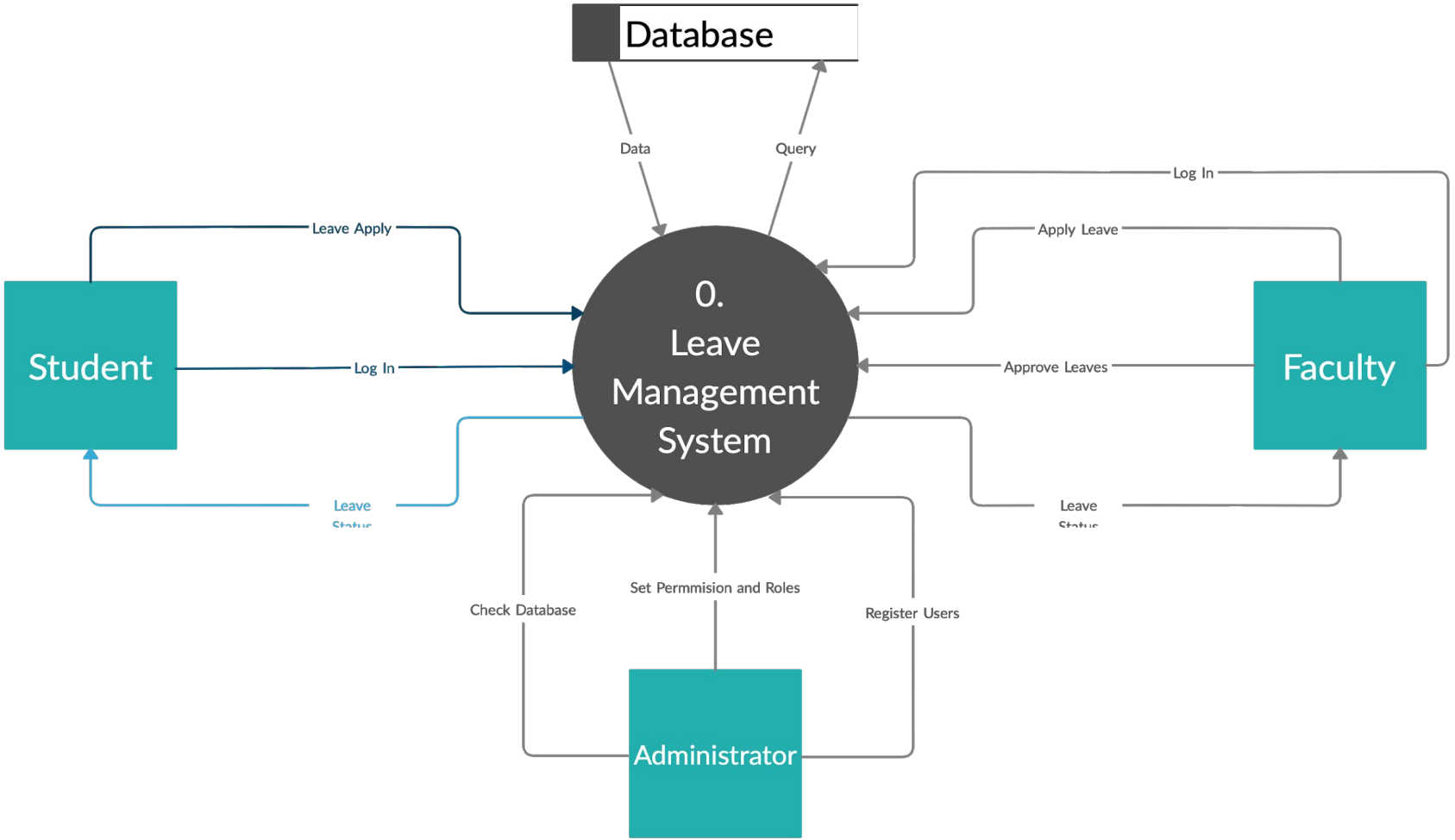
Separation of the authentication system so that it can be used be independently.

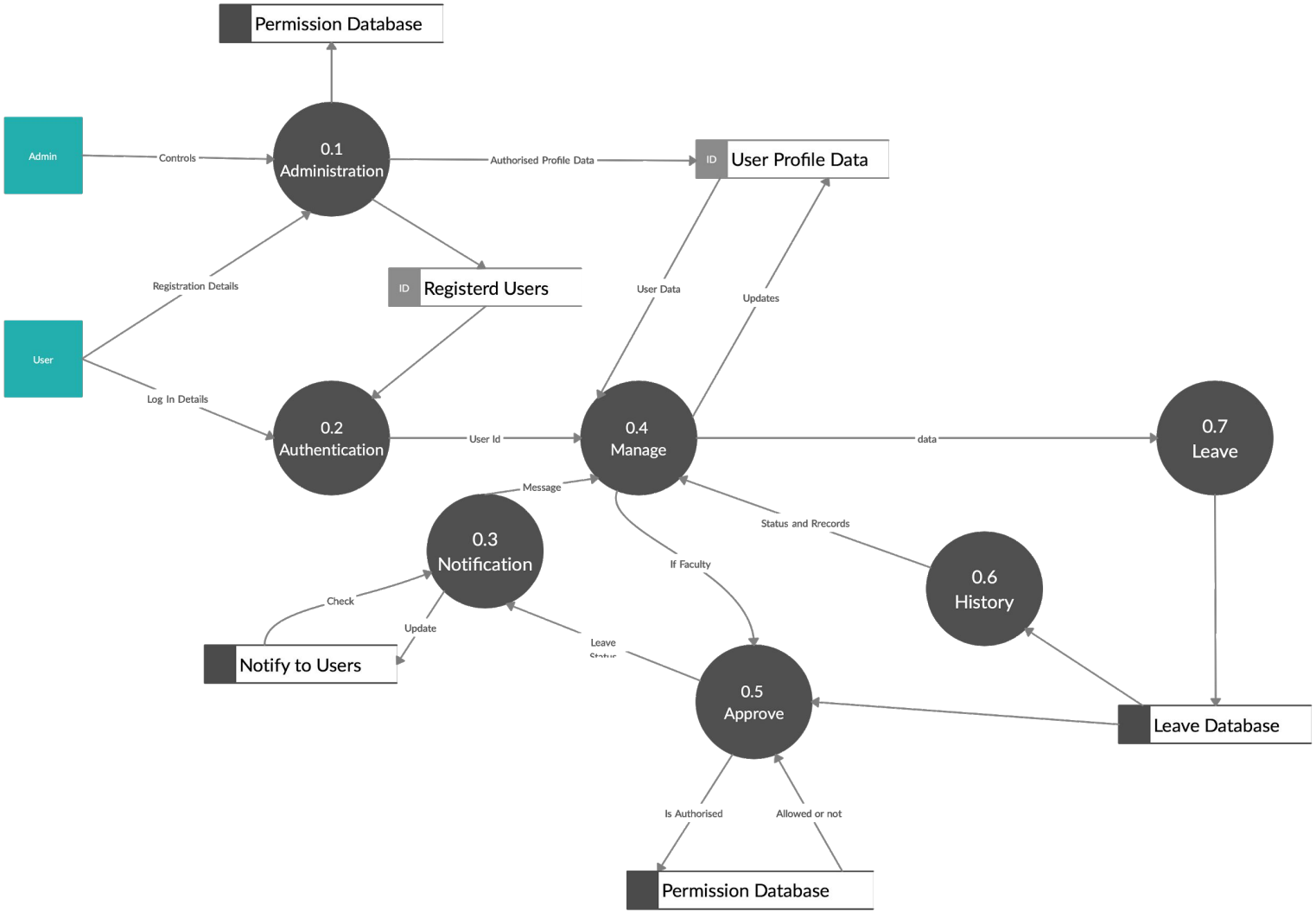
Apply state of the art technology like redis or memcache and developing the single page application to match the modern industry standard.

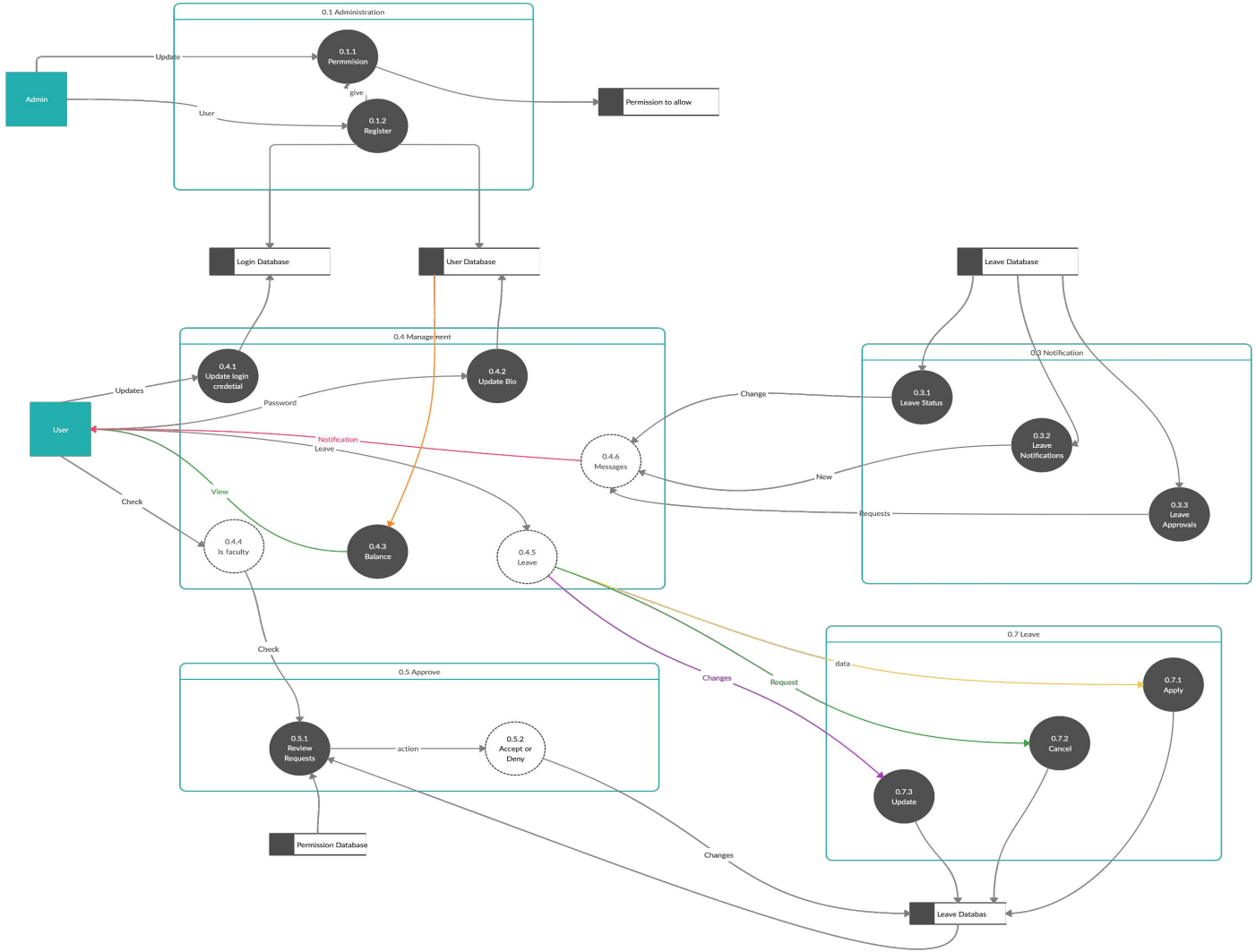
ER Diagram


Department
No. of days
From
Address while on leave (O)
Roll No. (O)
Name
Leave Application
To
Reasons
Fill
Permmission
Forward (O)
User Name
Role (O)
User ID
User ID
Grant (O)
User ID
User Name
Has
Midde Name
First Name
Last Name
(Name)
Photo (O)
Department
Roll Number (O)
Profile
Have
(Date of birth)
Month
Year
Date
Email Id
Username
Phone Number
User ID
User name
Password
Users
Role name
Role id
Status
Roles
Have
Has
Type of leave
Role ID
Leave
Has
Limits
Max. Count
Type Of Leave
Role ID
sends
Notification
User ID
Username
Message
Has
Balance
Type
Remaining
Has
History
Status
Leave ID
(Report)
Leave Type
Remarks
Document (O)
Permissionary
Details

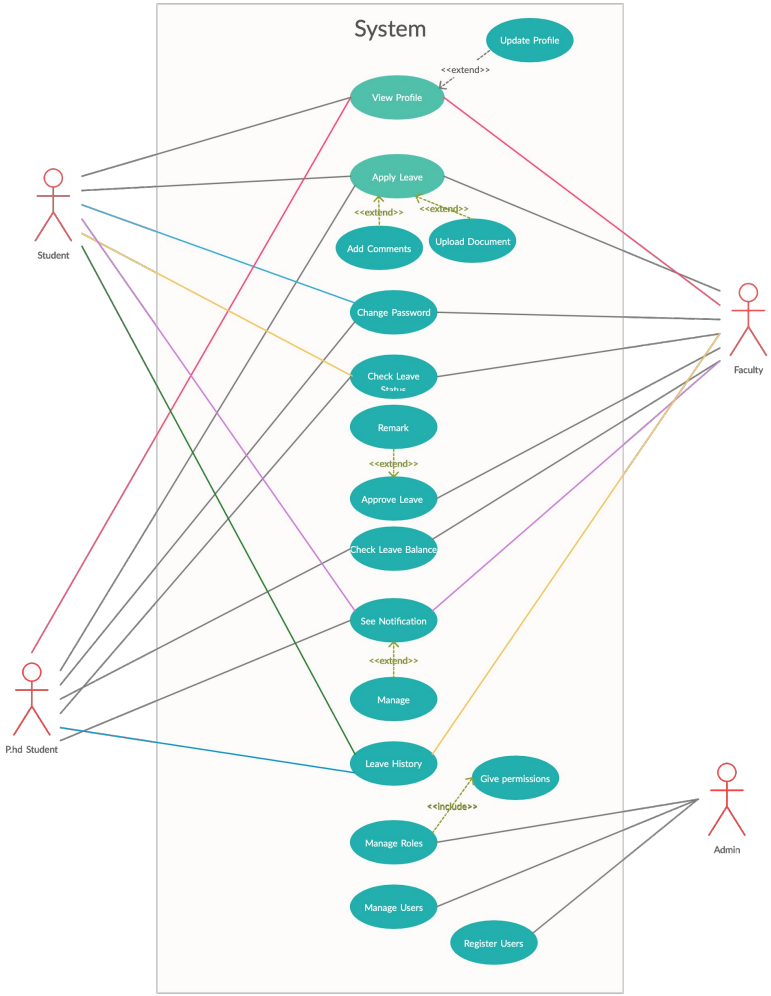
Data Flow Diagram


Database
Data
Query
Log In
Leave Apply
Apply Leave
0.
Leave
Management
System
Student
Log In
Approve Leaves
Faculty
Leave
Leave
Check Database
Set Permmision and Roles
Register Users
Administrator

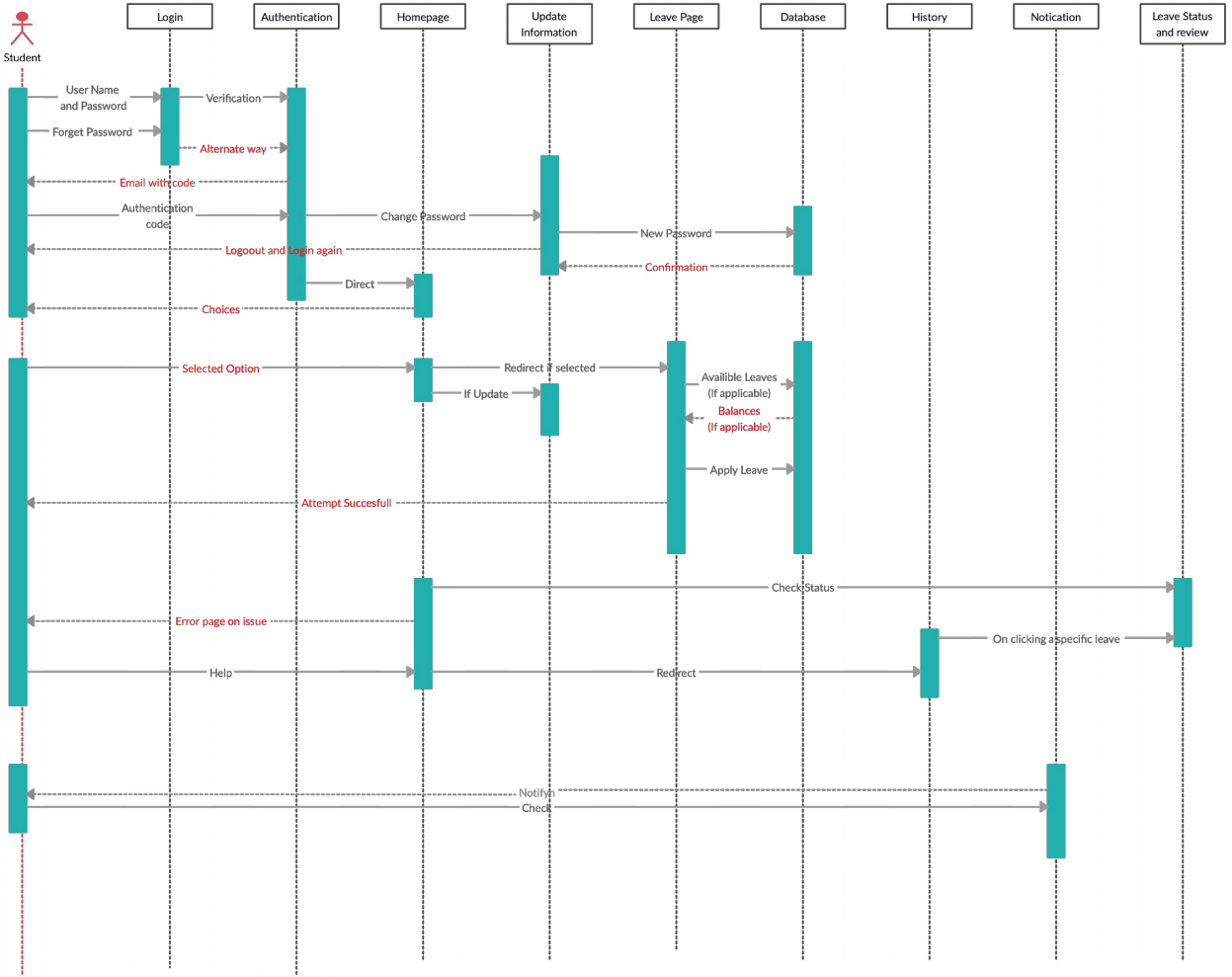

Permission Database
Admin
Controls
0.1
Administration
Authorised Profile Data
ID
User Profile Data
Registration Details
ID
Registerd Users
User Data
Updates
User
Log In Details
0.2
Authentication
User Id
0.4
Manage
data
0.7
Leave
Message
0.3
Notification
Status and Rrecords
If Faculty
0.6
History
Check
Update
Notify to Users
Leave
0.5
Approve
Leave Database
Is Authorised
Allowed or not
Permission Database

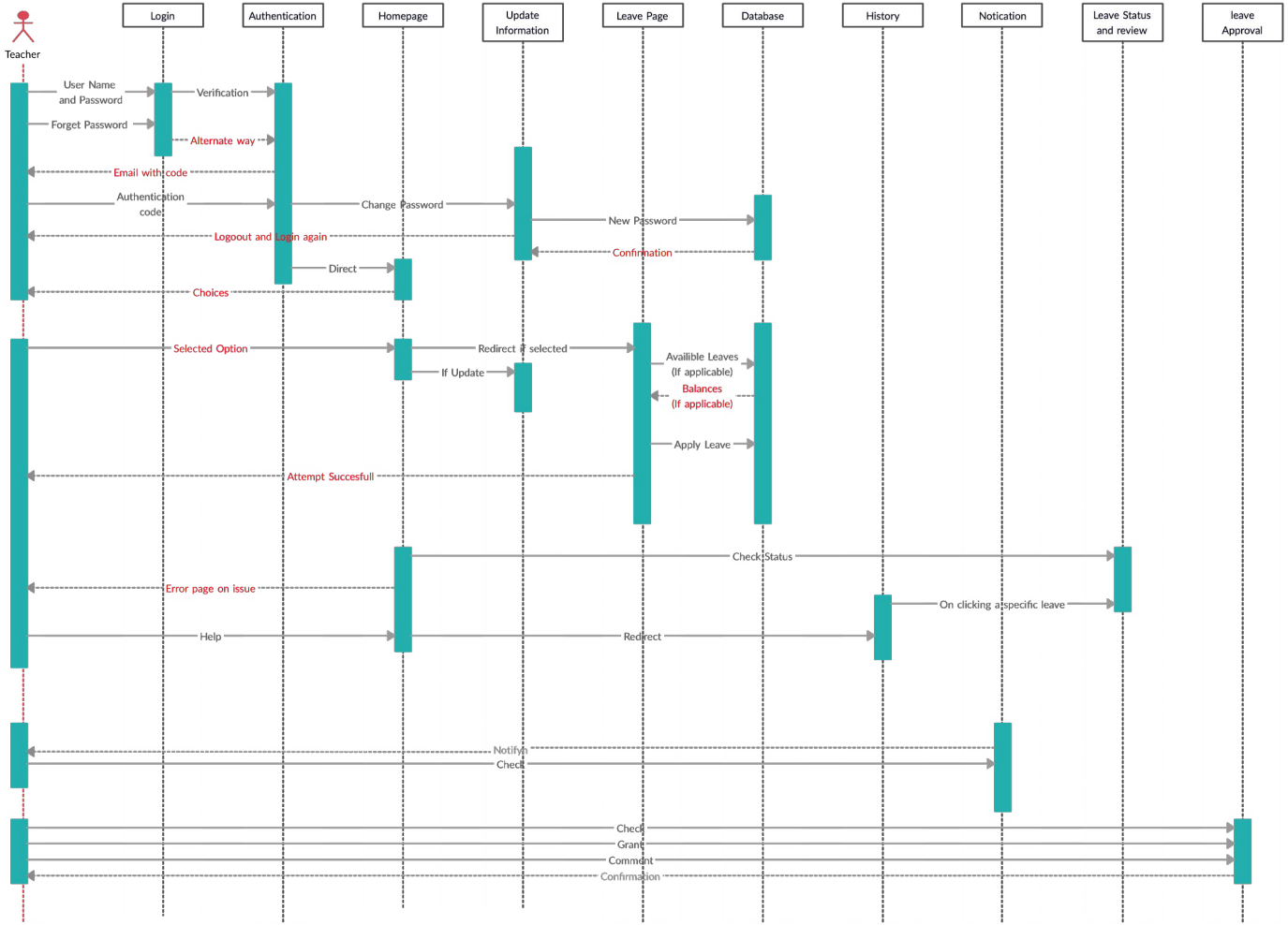

0.1 Administration
Admin
Update
0.1.1
Permmision
give
User
0.1.2
Register
Permission to allow
Login Database
User Database
Leave Database
0.4 Management
0.4.1
Update login
credetial
0.4.2
Update Bio
Updates
Password
User
Notification
Leave
View
Check
0.4.4
Is faculty
0.4.3
Balance
0.4.5
Leave
0.4.6
Messages
0.3 Notification
Change
0.3.1
Leave Status
0.3.2
Leave
Notifications
New
Requests
0.3.3
Leave
Approvals
0.7 Leave
data
0.7.1
Apply
Request
0.7.2
Cancel
Changes
0.7.3
Update
0.5 Approve
Check
0.5.1
Review
Requests
action
0.5.2
Accept or
Deny
Permission Database
Changes
Leave Databas

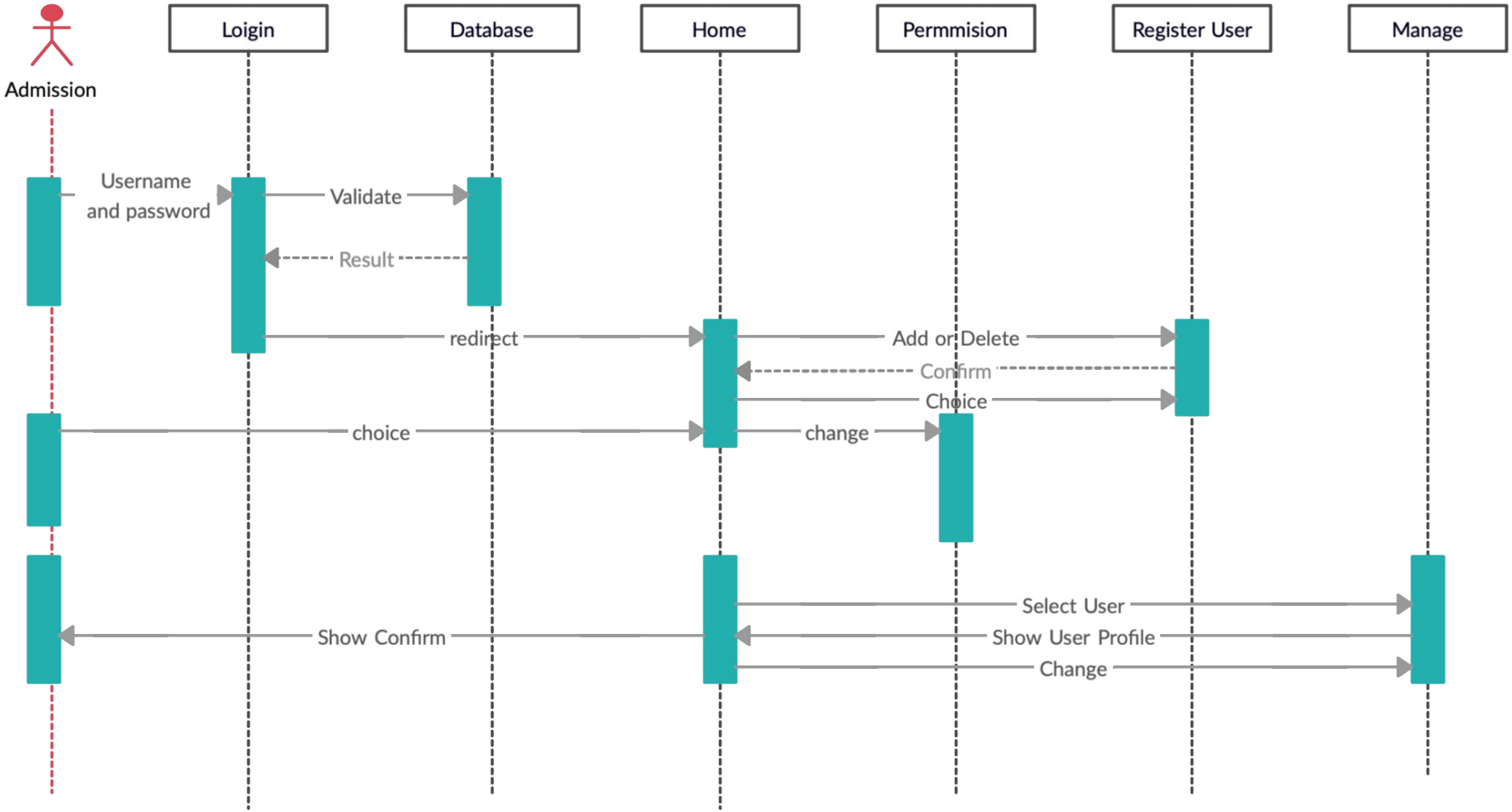
Use Case Diagram


System
Update Profile
<<extend>>
View Profile
Apply Leave
<<extend>>
<<extend>>
Add Comments
Upload Document
Change Password
Check Leave Status
Remark
<<extend>>
Approve Leave
Check Leave Balance
See Notification
<<extend>>
Manage
Leave History
Give permissions
<<include>>
Manage Roles
Manage Users
Register Users
Student
Phd Student
Faculty
Admin

Sequence Diagram


Student
Login
Authentication
Homepage
Update Information
Leave Page
Database
History
Notication
Leave Status and review
User Name and Password
Verification
Forget Password
Alternate way
Email with code
Authentication code
Change Password
New Password
Logoout and Login again
Confirmation
Direct
Choices
Selected Option
Redirect if selected
If Update
Availible Leaves (If applicable)
Balances (If applicable)
Apply Leave
Attempt Succesfull
Check Status
Error page on issue
On clicking a specific leave
Help
Redirect
Notify
Check


Teacher
Login
Authentication
Homepage
Update Information
Leave Page
Database
History
Notication
Leave Status and review
leave Approval
User Name and Password
Verification
Forget Password
Alternate way
Email with code
Authentication code
Change Password
New Password
Logoout and Login again
Confirmation
Direct
Choices
Selected Option
Redirect if selected
If Update
Availible Leaves (If applicable)
Balances (If applicable)
Apply Leave
Attempt Succesfull
Check Status
Error page on issue
On clicking a specific leave
Help
Redirect
Notifyn
Check
Check
Grant
Comment
Confirmation


Admission
Loigin
Database
Home
Permmision
Register User
Manage
Username
and password
Validate
Result
redirect
Add or Delete
Confirm
Choice
choice
change
Select User
Show Confirm
Show User Profile
Change

MANORANJAN
KUMAR

GAURAO
NANDEKAR

Thanks

Aman
Sheel

SAHIL
BAJAJ

Viki.Singh