Department of Information Technology

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UNIVERSITY OF MUMBAI

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A Project Report on

Chatbot for Efficient Resource Allocation and Management

Submitted in partial fulfillment of the degree of
Bachelor of Engineering(Sem-7)
in
INFORMATION TECHNOLOGY

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1. Project Conception and Initiation

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1.1 Abstract

When considering an institution regardless, whether it is a school or university it is consequential that the students are edified in a congruous environment. This generalizes that the infrastructure should fascinate every requisite as cardinal or required by the students or the faculty in that environment.Present day process implies that all the work is done manually.

1.2 Objectives

- To automate the process of manual allotment.
- Overcome the manual errors that are ought to happen in the process.
- Save time of the end users.

1.3 Literature Review

- Automatic timetable generator Saritha M,Pranav Kiran Vaze,Pradeep,Mahesh N R International Journal of Advanced Research in Computer Science and Software Engineering, Volume 7, Issue 5, May 2017,ISSN: 2277 128X.
- Timetable generation and Leave management system Shashikala K,Shruthi C R,Vinutha N,Roopalakshmi S SSN (Online) 2394-2320 International Journal of Engineering Research in Computer Science and Engineering(IJERCSE)Vol5,Issue6.
- Automatic and effective allocation for examination seats Neelkanth Sharma,Abhishek Mahale,Ashwini Andhale,Yogesh Joshi International Journal of Engineering Research and Management (IJERM) – Volume 3 Issue 5- May 2017.

- Timetable Generator Albert Chai MengFatt , ChaiWeeKee , Lee Cheeheong PuahSuet Ni, Alvis Yeo Kok Yong, Mark Yeo Soon Hock, and Edmond C Prakash School of Computer Engineering Nanyang Technological University Singapore - 639 798.
- Review of integrated applications with AIML based chatbot Md. Shahriare Satu, Md.Hasnat Parvez, Shamim-AL-Mamun 1st International Conference on Computer Information Engineering, 26-27 November,2015.

1.4 Problem Definition

To provide a web based application for efficient allotment of infrastructure.”Chatbot For Efficient Resource Allocation And Management” will be integrated with an AI chatbot for utilized interaction.

1.5 Scope

- Proposed System will provide comfort to the manpower and will avoid hamper in academics.
- Provides with an AI Chatbot in runtime of academics.
- It will avoid inconsistencies visually perceiving that no lab session is missed due to any reason by providing alternate infrastructure options.
- Additionally features provided like reservation and dynamic allocation due to any activities.

1.6 Technology stack

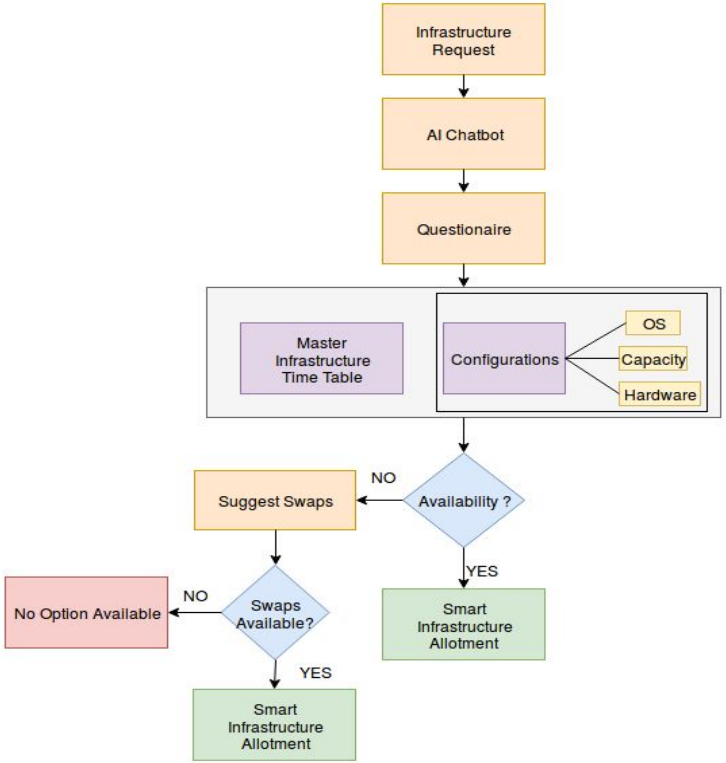
- Chatbot - Python
- Website - HTML, CSS
- Database - PHP, MySQL

1.7 Benefits for environment & Society

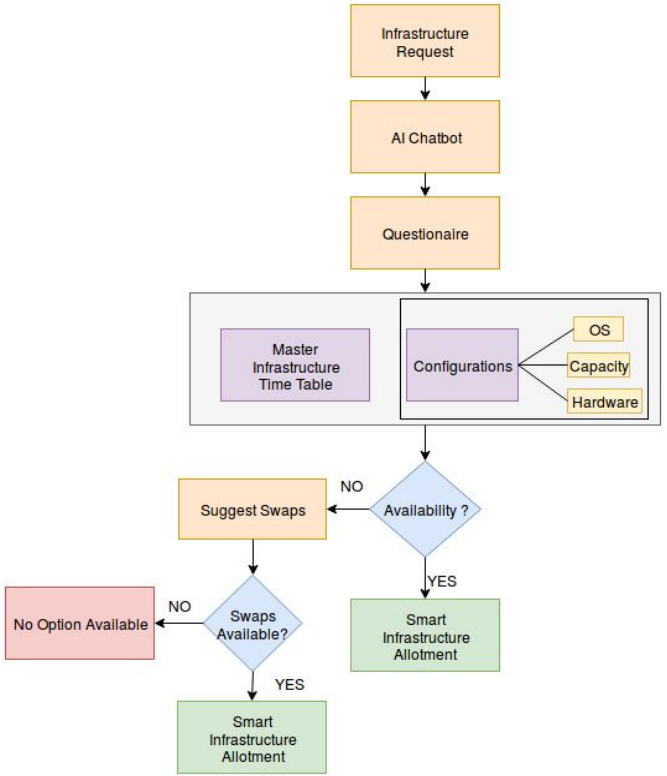
- Save time invested by faculties to find lab manually.
- Reduce manpower.
- Provide efficient infrastructure allotment.

2. Project Design

2.1 Proposed System

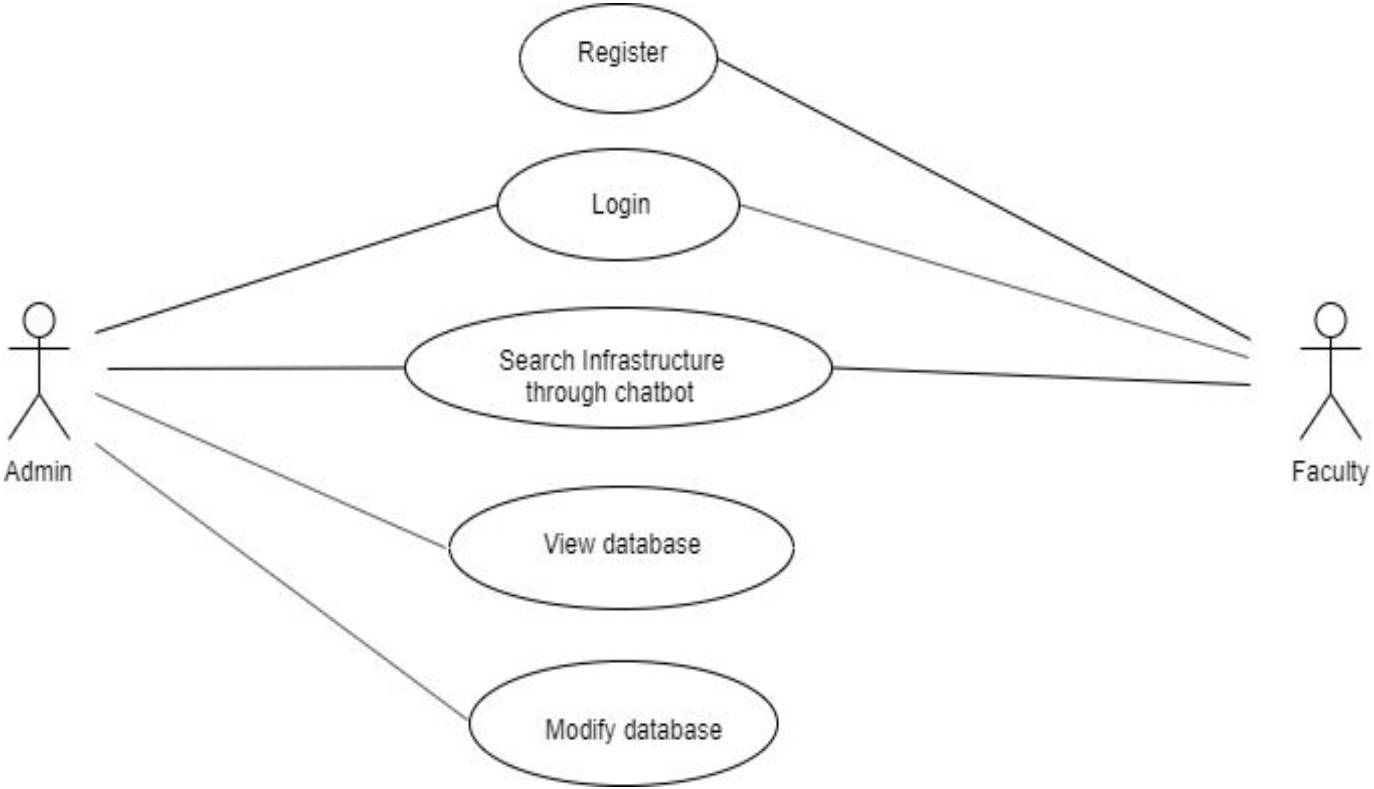


2.2 Design(Flow Of Modules)

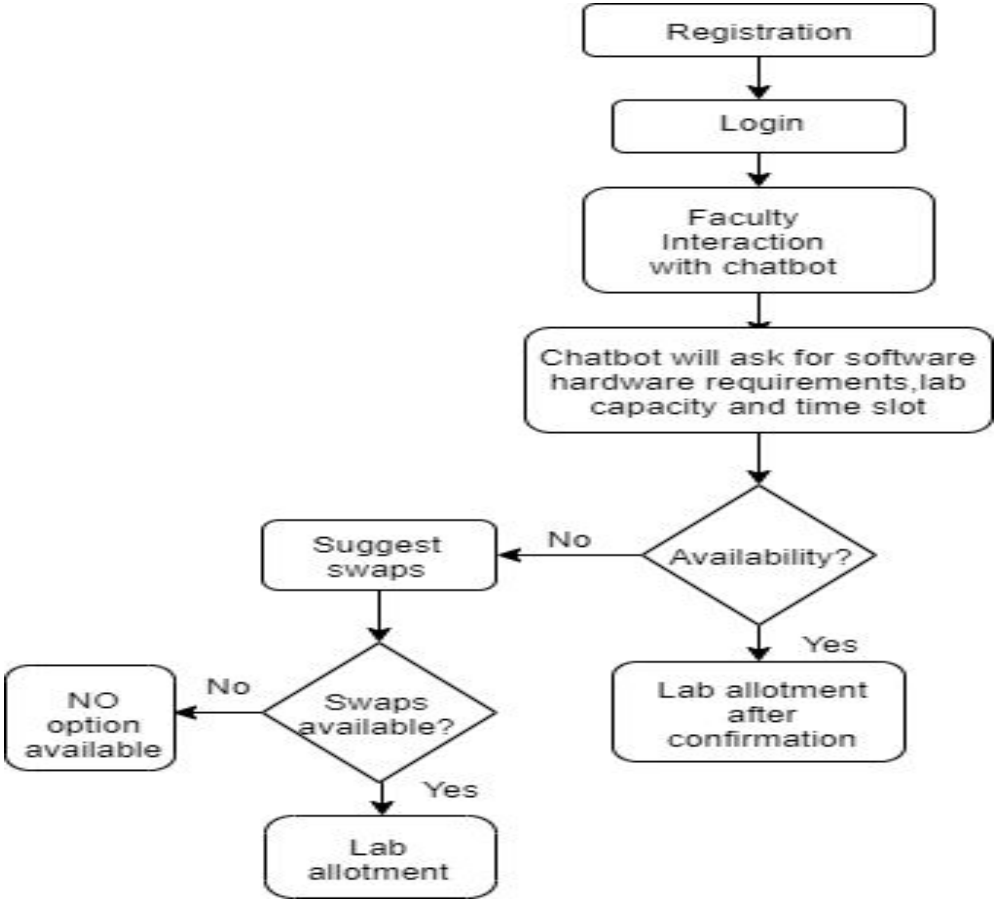


Infrastructure request made through Chatbot followed by requirements are taken from user and accordingly appropriate infrastructure is alloted.

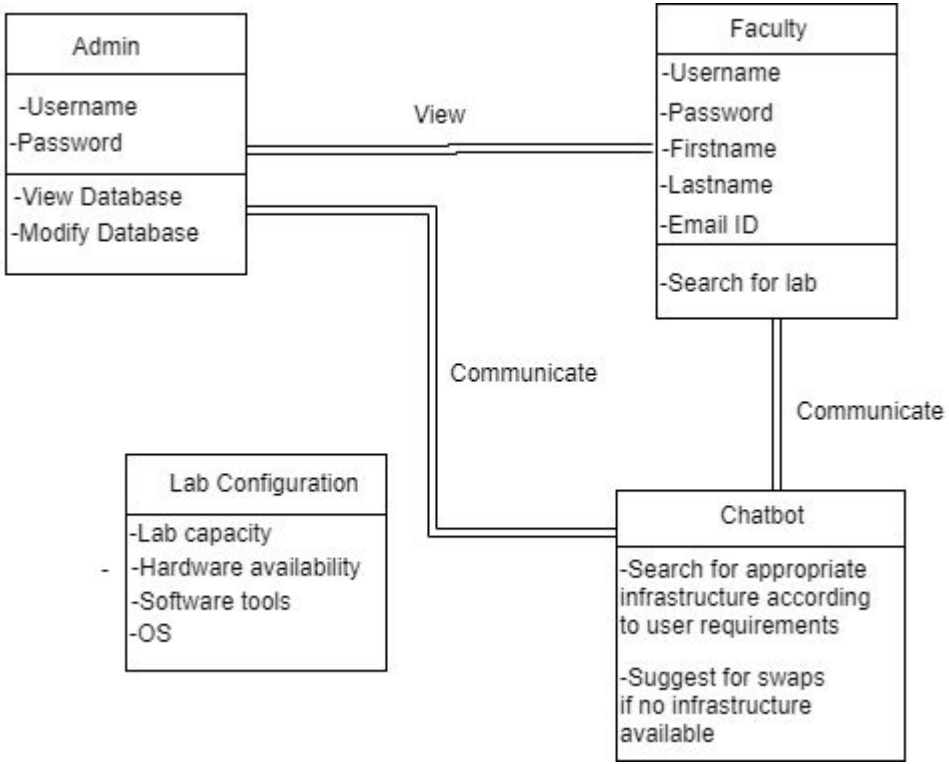
2.3 Description Of Use Case



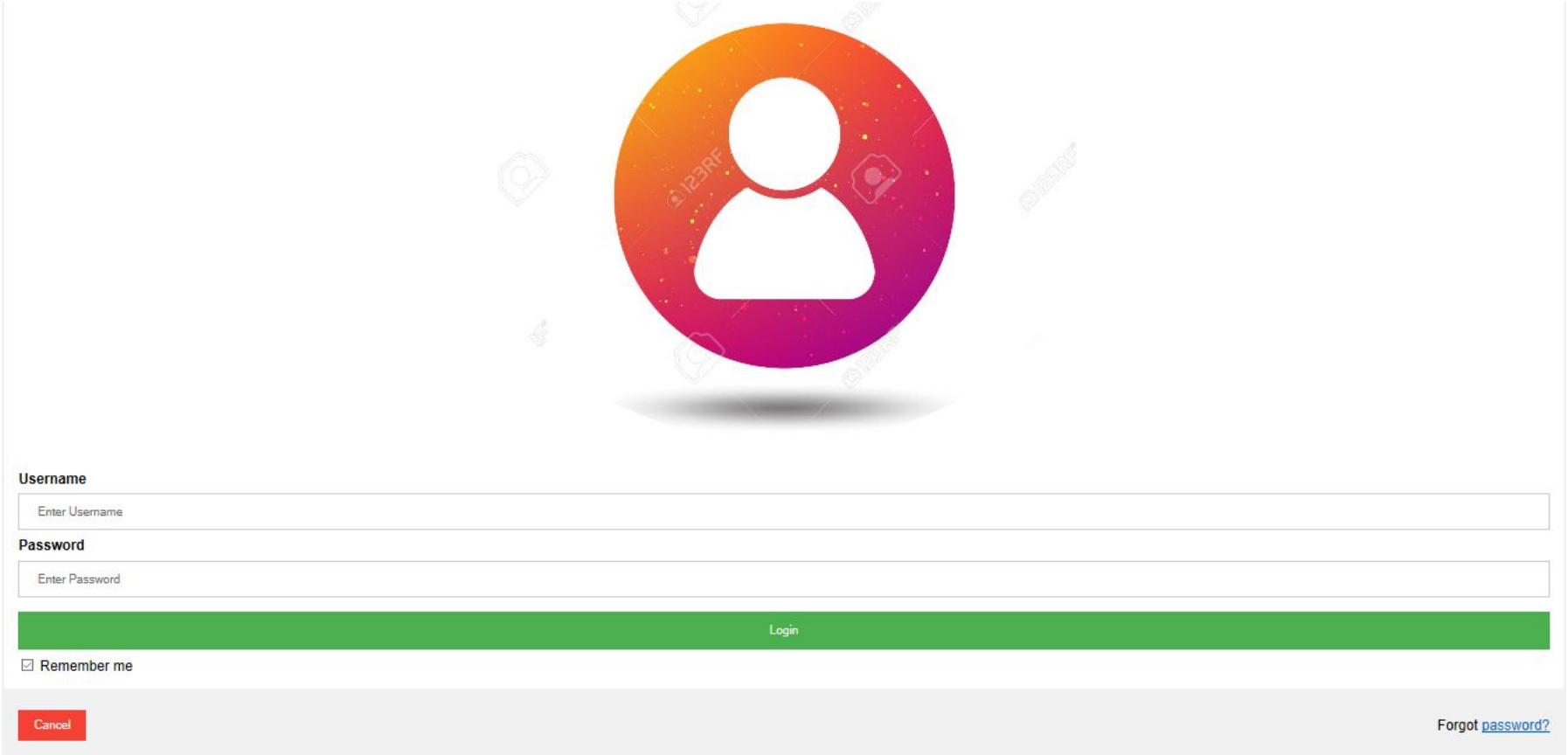
2.4 Activity diagram



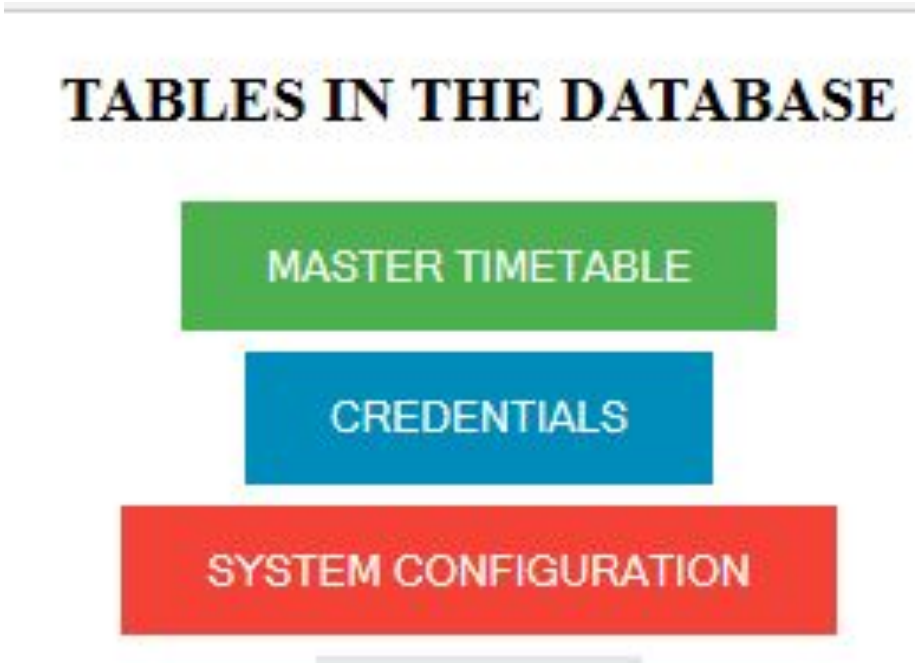
2.5 Class Diagram



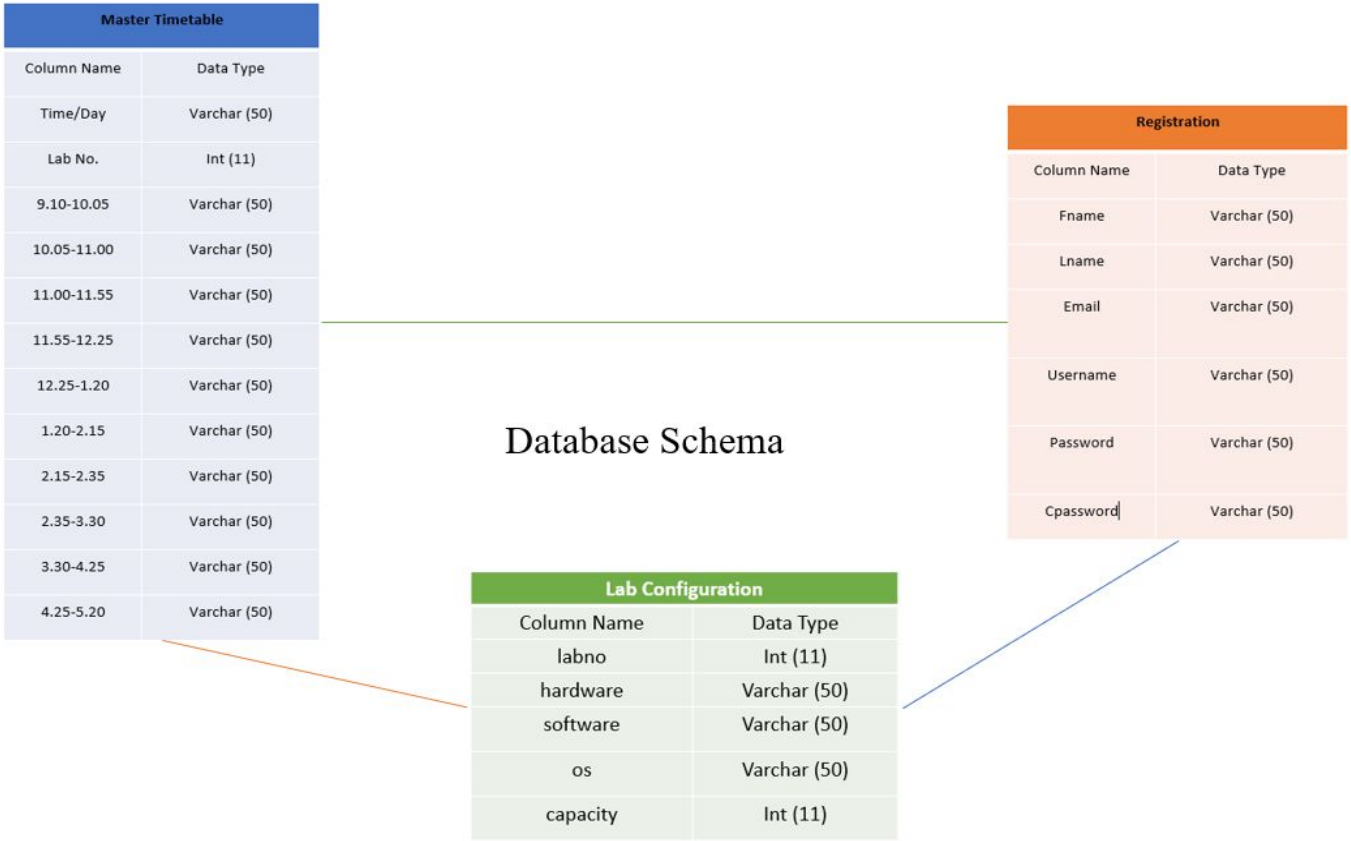
2.6 Module-1


Username
Enter Username
Password
Enter Password
Login
Remember me
Cancel
Forgot password?

Module-2


TABLES IN THE DATABASE
MASTER TIMETABLE
CREDENTIALS
SYSTEM CONFIGURATION

Module-n


Master Timetable
Column Name
Data Type
Time/Day
Varchar (50)
Lab No.
Int (11)
9.10-10.05
Varchar (50)
10.05-11.00
Varchar (50)
11.00-11.55
Varchar (50)
11.55-12.25
Varchar (50)
12.25-1.20
Varchar (50)
1.20-2.15
Varchar (50)
2.15-2.35
Varchar (50)
2.35-3.30
Varchar (50)
3.30-4.25
Varchar (50)
4.25-5.20
Varchar (50)
Database Schema
Registration
Column Name
Data Type
Fname
Varchar (50)
Lname
Varchar (50)
Email
Varchar (50)
Username
Varchar (50)
Password
Varchar (50)
Cpassword
Varchar (50)
Lab Configuration
Column Name
Data Type
labno
Int (11)
hardware
Varchar (50)
software
Varchar (50)
os
Varchar (50)
capacity
Int (11)

2.7 References

1. Saritha M, Pranav Kiran Vaze, Pradeep, Mahesh N R,on”Automatic Time Table Generator”,International Journal of Advanced Research in Computer Science and Software Engineering,Volume7,Issue5,May2017,ISSN: 2277 128X.

2. Shashikala K,Shruthi C R,Vinutha N,Roopalakshmi S on“Timetable Generation and Leave Management System”,ISSN(Online)2394-2320 International Journal of Engineering Research in Computer Science and Engineering (IJERCSE) Vol 5, Issue 6, June 2018.

3. Neelkanth Sharma, Abhishek Mahale, Ashwini Andhale,Yogesh Joshi on "Automatic and Effective Allocation for Examination Seats using Android Application" International Journal of Engineering Research and Management (IJERM) – Volume 3 Issue 5- May 2017.

4. Md.Shahraire Satu, Md. Hasnat P,Shamim-AI-Mamun on Review of integrated applications with AIML based chatbot 1st International Conference on Computer & Information Engineering, 26-27 November,2015.

3.Planning for next semester
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Planning

- Creation of AI based chatbot using python.
- Integrating it with web based application.

Thank You