E-HEALTHCARE MANAGEMENT SYSTEM

Team Presentation

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21-00907

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21-01278

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21-01299

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21-00624

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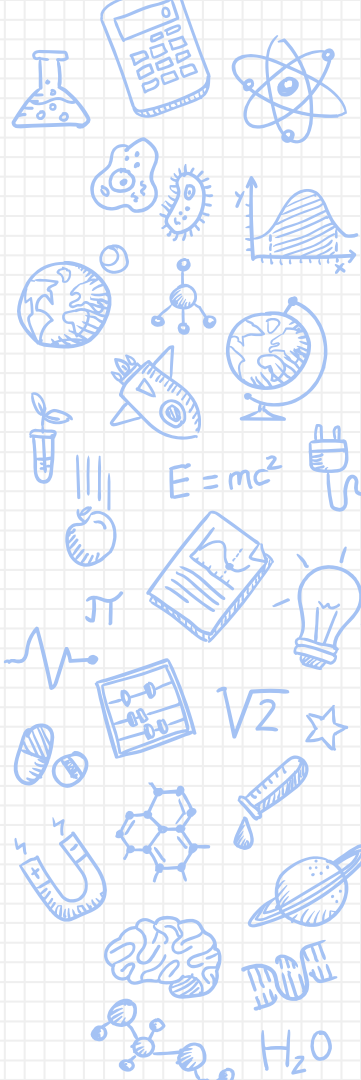
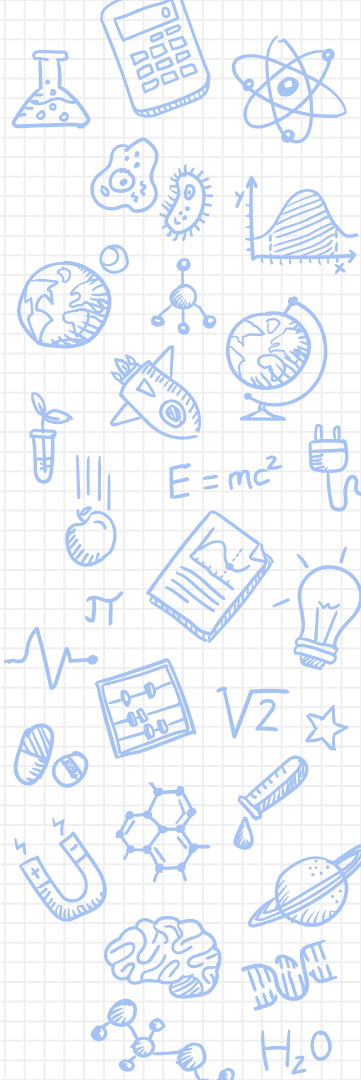


Why We Choose This Idea?

We know hospitals deal with the life and health of the patient. Excellent medical care relies on well-trained doctors, nurses and high-quality facilities and equipment, and relies on good keeping records.

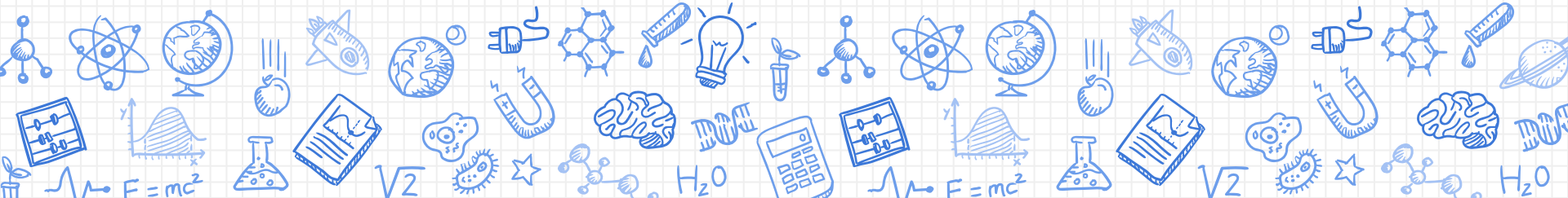
Diseases are increasing day by day, so it is tough for physicians to prescribe the patient, one wrong decision can lead to patient death. In most of the hospitals records about patient's ailment is being to save on papers, so retrieve of the patient history is tough and manually search record takes a lot of times and efforts, and major problems in hospitals are, the patient does not care about their medical records. They lose their medical files (Prescriptions), the result of which is the patient must retest and re-check up again according to his diseases.

Without an accurate, comprehensive, and up to date patient medical record, a doctor may engage in many troubles to find the actual cause of the patient's disease. In other words, medical personnel may not offer the best treatment or may lead to misdiagnosing of the patient. Record keeping is an important aspect of any organization in their day-to-day operation. Good records also ensure that hospitals administration run smoothly



Introduction

Let's start with the first set of slides

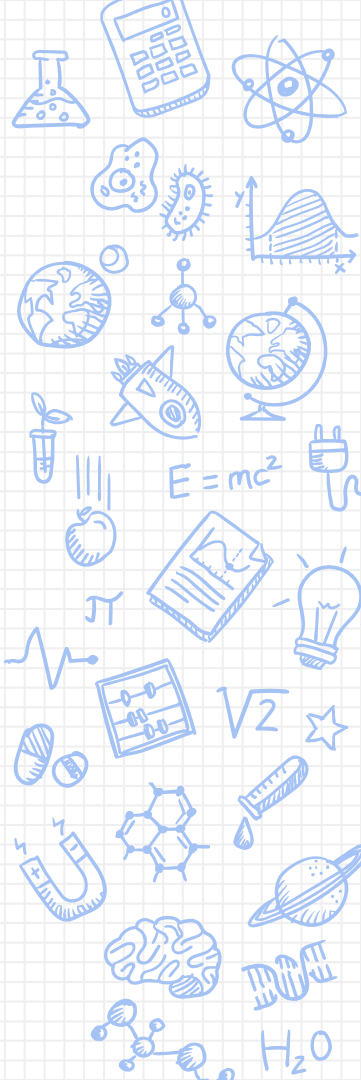


Introduction

Our system forms a visiting platform for doctors, administrators, and receptionists. Use of this application roots out problems such as data missing, information miss-match, long lane of patients in hospital ...etc. It accurately analyses the usage percentage of hospital resources, bed occupation ratio, administration, Laboratory information etc.

Common Features (Functionalities):

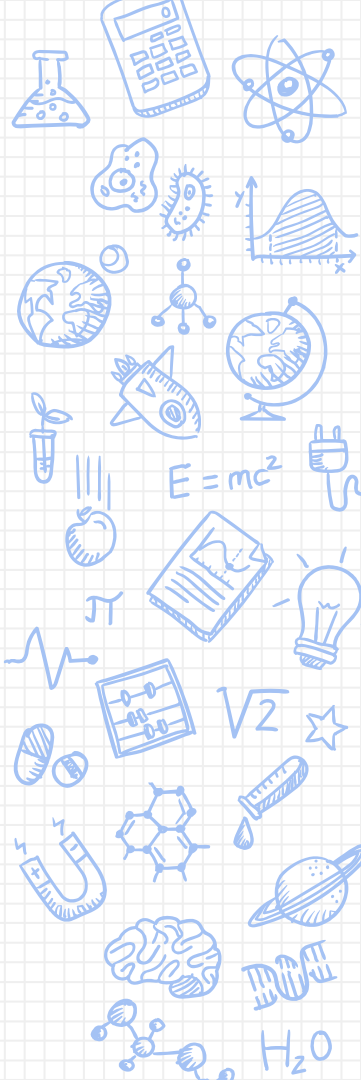
- Appointment Management
- Patient Records Management
- Staff Management



Introduction

✗ E-Health Management Systems are in high demand to handle increasing population needs and aid the practicing doctors and hospital service and support staff with timely service and precision.

✗ Our application of E-Health Management system will provide comprehensive, effective, and efficient solution for carrying out management of hospitals and clinics fulfilling the needs and requirements of all stakeholders such as doctors, and staffs.



The main function of the system

✗ It's to register and store patient details and doctor details.

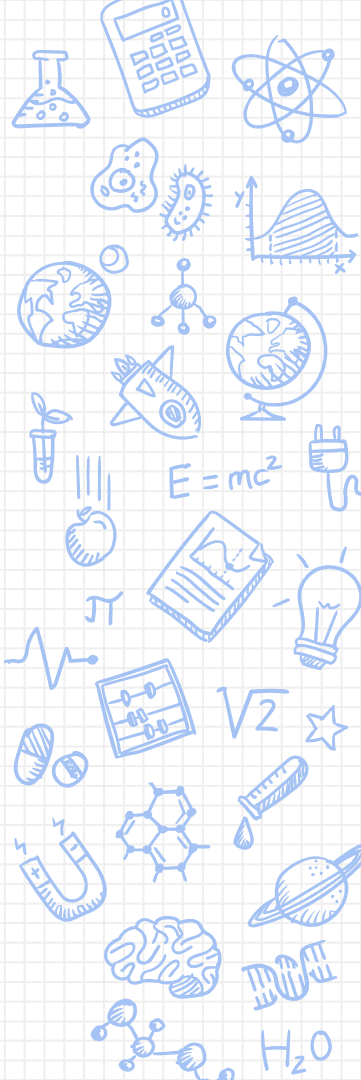
✗ Also, you can retrieve these details as and when required, and to manipulate these details meaningfully System.

✗ The input contains patient details, diagnosis details, while system output is to get these details on to the screen.

✗ The Hospital Management System can be entered using a username and password. It is accessible either by an administrator, doctor or receptionist. Only they can add data into the database.

✗ The data can be retrieved easily.

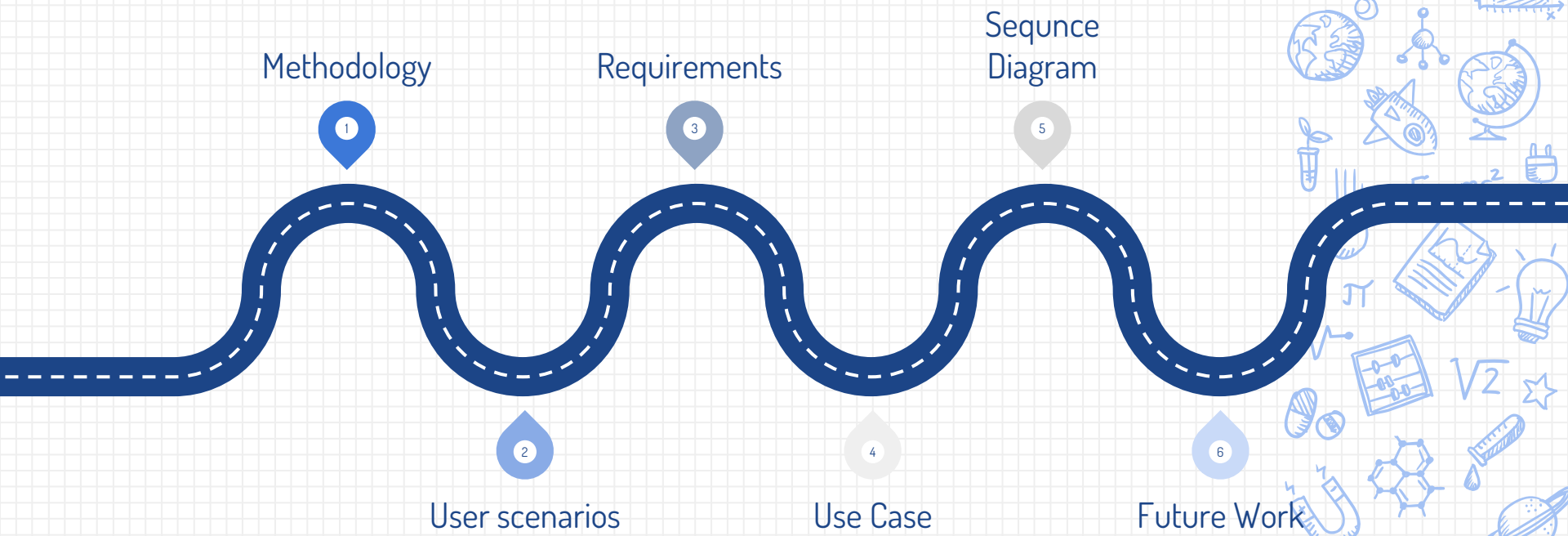
✗ The data is well protected for personal use and makes the data processing very fast.



Stakeholders

Stakeholders	Type	Description
The Doctor	**End user of the system**	**Uses System to access patient's details and diagnosis details, add his prescription**
The Receptionist	**End user of the system**	**Uses System to access patient's details**
The Admin	**Administrator user of the system**	**Manage Users of the system**

Roadmap


Methodology
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User scenarios
2
Requirements
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Future Work
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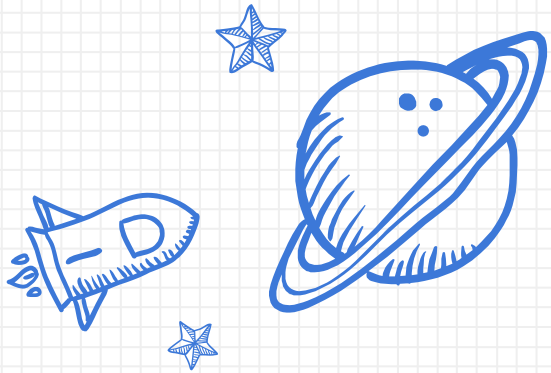


Methodology

Methodology

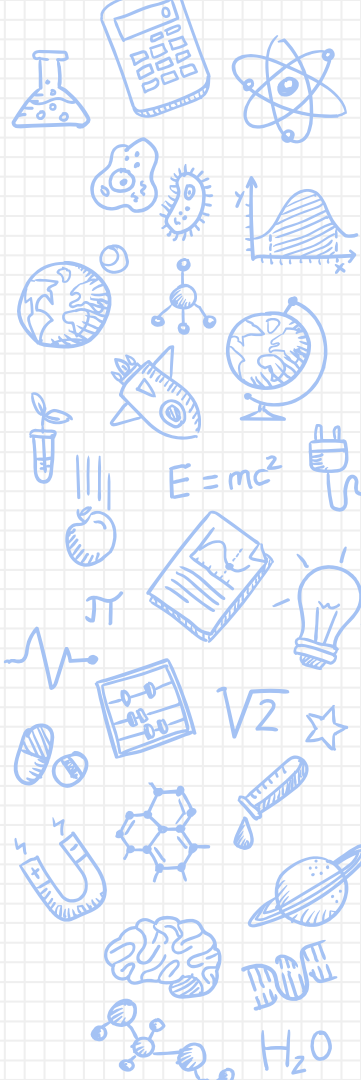
We choose Agile Methodology

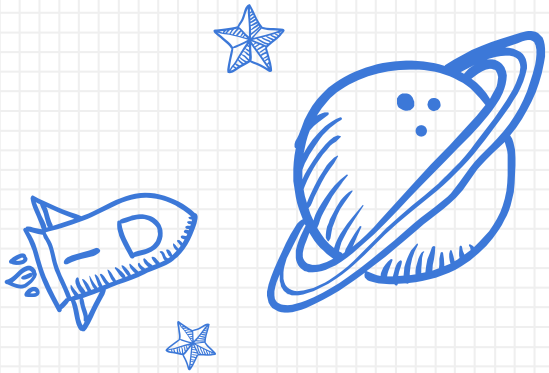
The aim of using agile methodology:

✗ Reduce overheads in the software process and to be able to respond quickly to changing requirements without excessive rework.

✗ Customers are closely involved throughout the development process.

✗ The software is developed in increments with the customer specifying the requirements to be included in each increment.

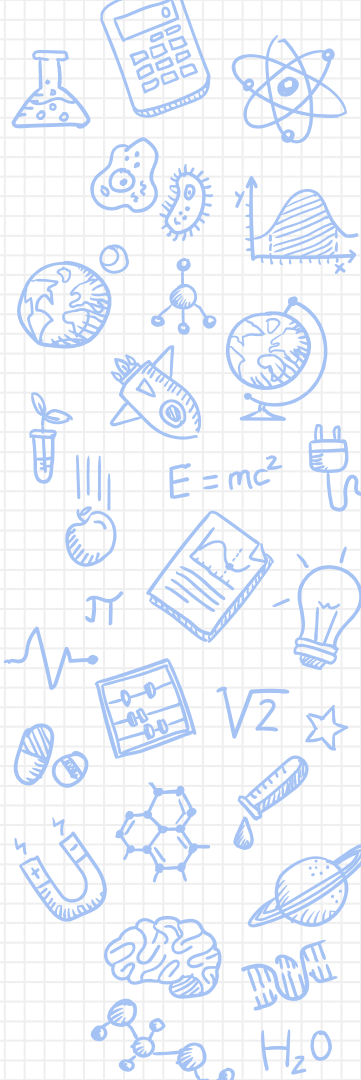




User Scenarios

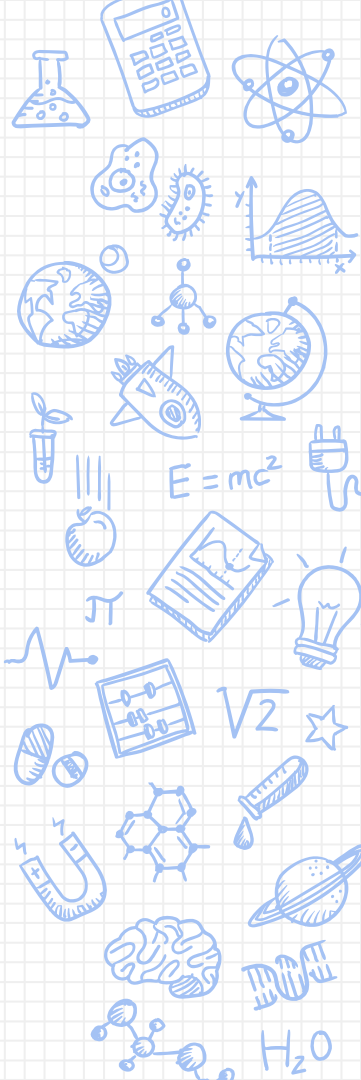
User Scenarios

✗ **In case of administrator**, Once the software is launched, a screen containing the login form appears allowing admin to enter his own login info, the software will validate the login info, if it is not valid the admin will be reattempt to re-enter his login info. Otherwise, a login session will be created to let the user into the system. Once the admin logged in successfully, a screen will be provided having options to view, insert, modify staff details, and access the database. In addition to the ability to reboot system, shut down system, block system, disable any service.



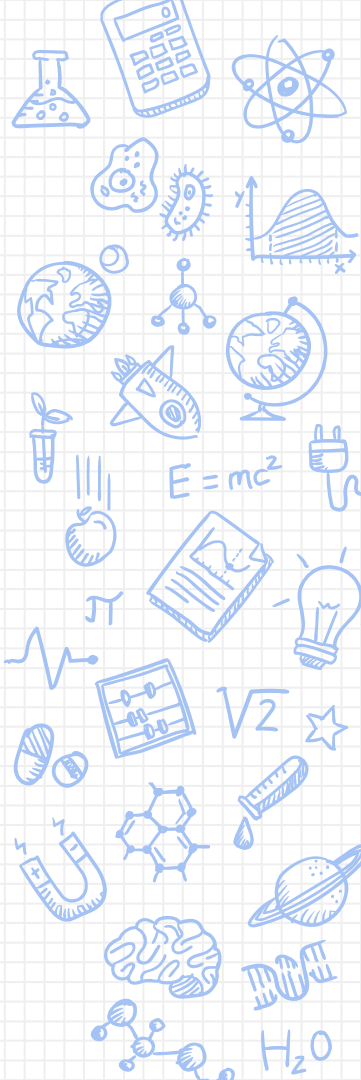
User Scenarios

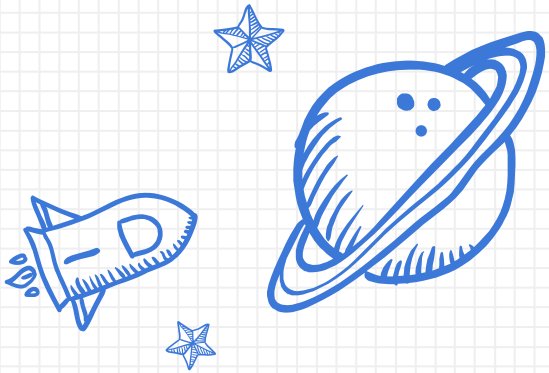
✗ **In case of receptionist**, Once the software is launched, a screen containing the login form appears allowing receptionist to enter his own login info, the software will validate the login info, if it is not valid the receptionist will be reattempt to re-enter his login info.
Otherwise, a login session will be created to let the receptionist into the system. Once the receptionist logged in successfully, a screen will be provided for medical appointments, check medical records of patient, create a new patient profile and insert patient details into it.



User Scenarios

✗ **In case of doctor**, Once the software is launched, a screen containing the login form appears allowing doctor to enter his own login info, the software will validate the login info, if it is not valid the doctor will be reattempt to re-enter his login info. Otherwise, a login session will be created to let the doctor into the system. Once the doctor logged in successfully, a screen will be provided for view, insert, and modify patient's diagnosis details.





Requirements

Functional Requirements

User Interface Requirements:

1. A login screen is provided in the beginning for entering the required username/password.

2. An unsuccessful login leads to a reattempt screen for again entering the same information. The successful login leads to a screen displaying system dashboard.

3. In case of administrator, a screen will be provided having options to view, insert, and modify staff details. In addition to the ability to reboot system, shut down system, block system, disable any service.

4. In case of receptionist, a screen will be provided for medical appointments, check medical records of patient, create a new patient profile and insert patient details into it.

5. In case of doctor, a screen will be provided for view, insert, and modify diagnosis details.

Functional Requirements

Software Requirements

OPERATING SYSTEM: WIN 7 & above/MAC/LINUX

DATABASE: SQL

LANGUAGE: JAVA

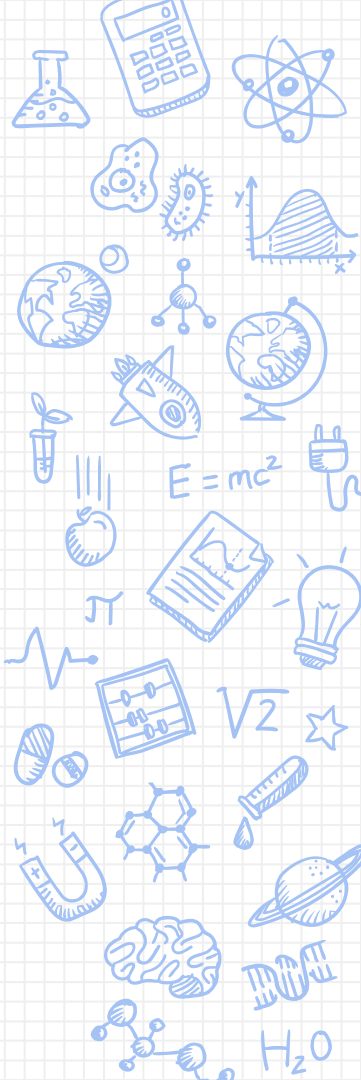
Hardware Requirements

PROCESSOR: Intel I3 6100K

PROCESSOR SPEED: 2.4GHZ

HARD DISK: 40GB

RAM: 2GB



Non-functional Requirements

Accuracy

The level of accuracy in the system will be high. It ensures that whatever information is coming is accurate.

Reliability

The reason for the increased reliability of the system is that now there would be proper storage of information.

Speed

We need the data processing to be very fast.

No Redundancy

In the system utmost care would be that no information is repeated anywhere, in storage or otherwise. This would assure economic use of storage space and consistency in the data stored.

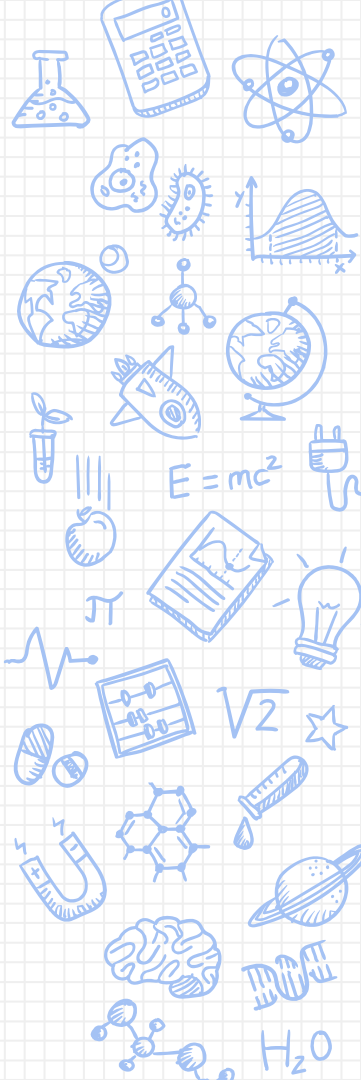
Security

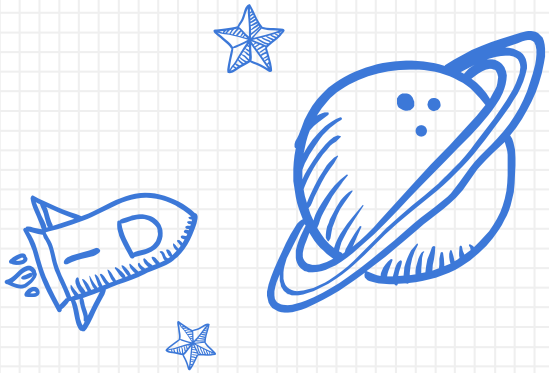
The password shall be 6-14 characters long, and must contain digits, characters.

Ease of use

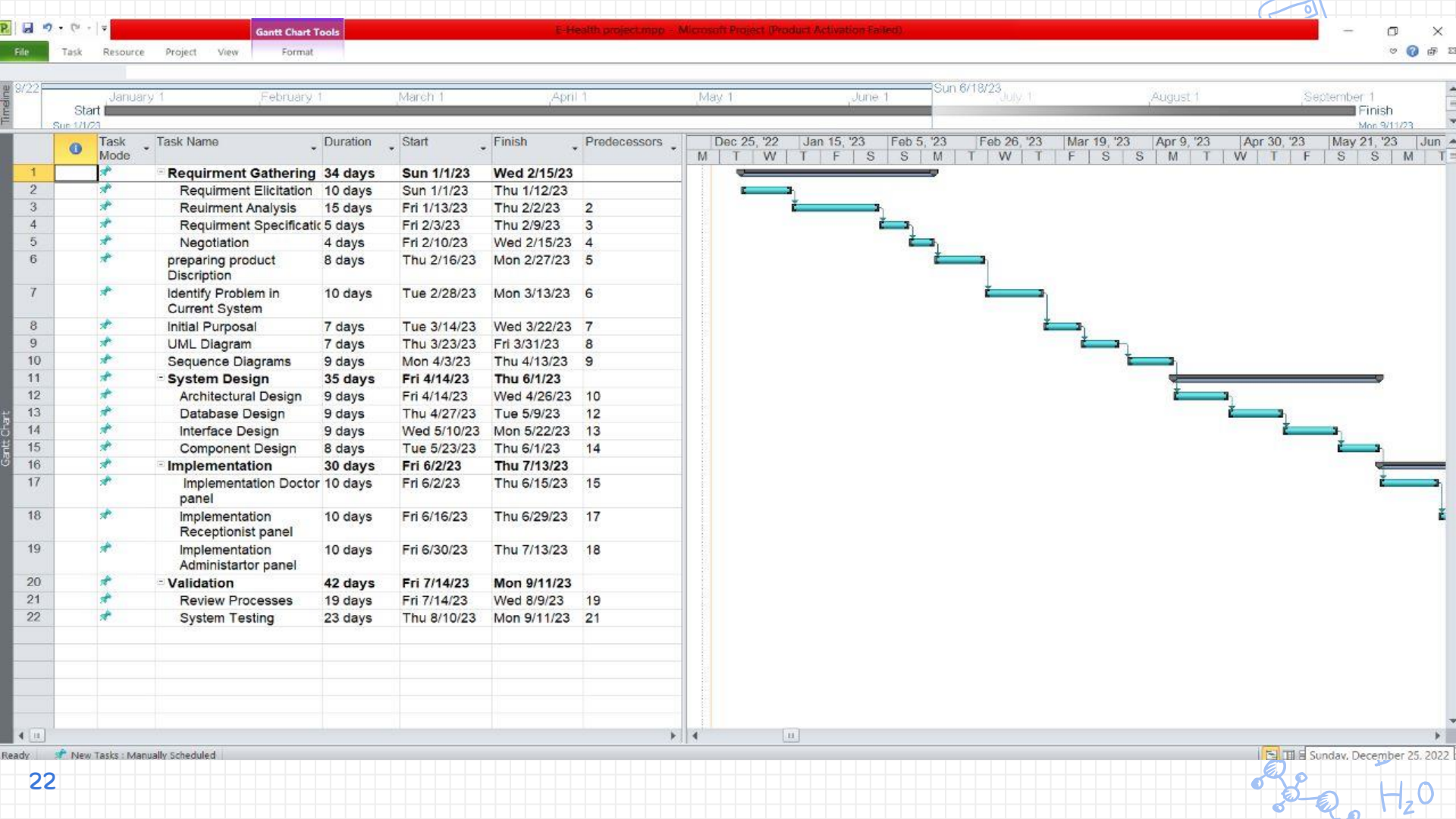
Training time

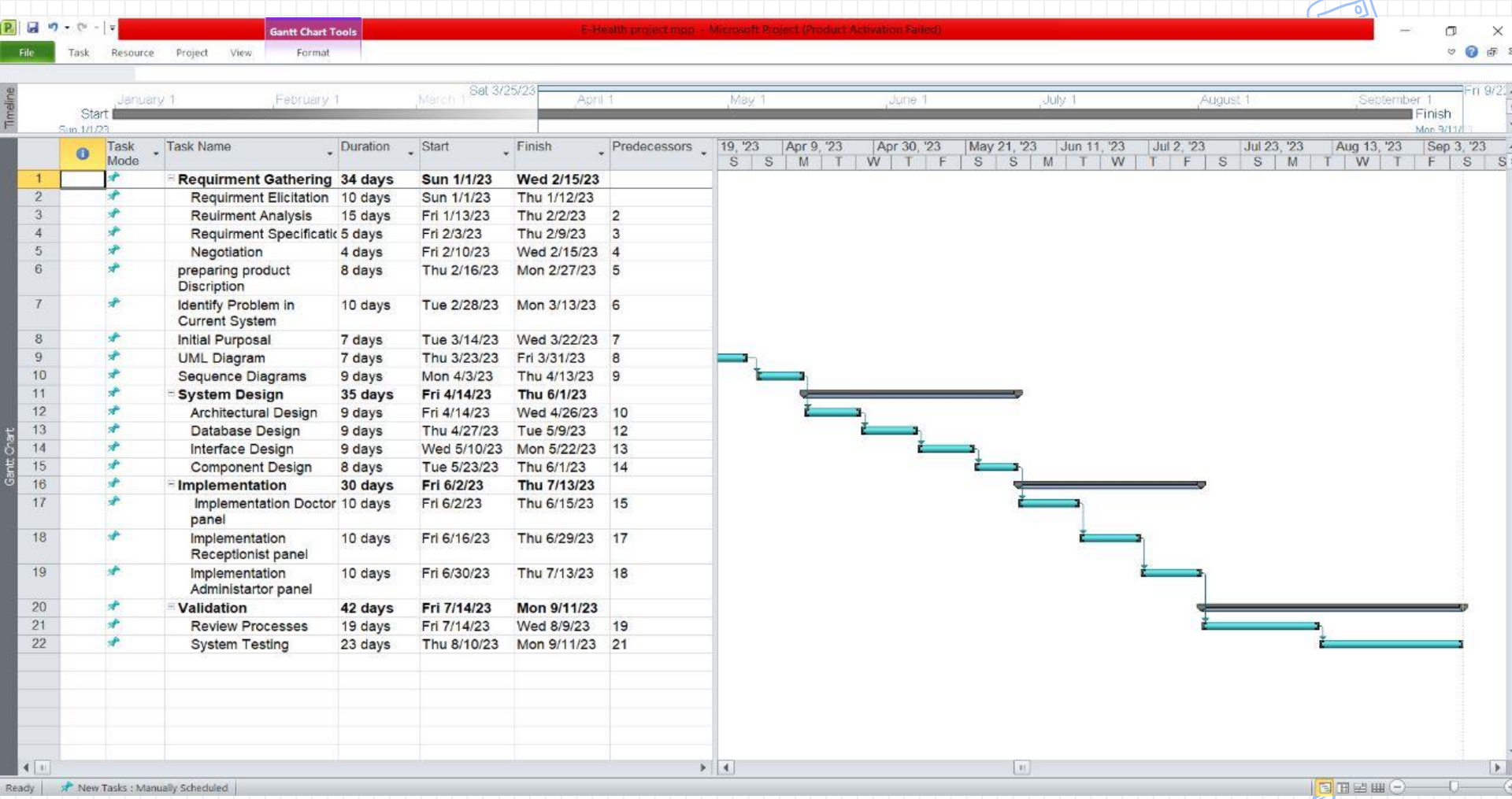
Number of help frames





Project Plan


Gantt Chart Tools
E-Health project.mpp - Microsoft Project (Product Activation Failed)
File
Task
Resource
Project
View
Format
Timeline
Start
Finish
Sun 6/18/23
January 1
February 1
March 1
April 1
May 1
June 1
July 1
August 1
September 1
Gantt Chart
Task Mode
Task Name
Duration
Start
Finish
Predecessors
1 Requirment Gathering 34 days Sun 1/1/23 Wed 2/15/23
2 Requirment Elicitation 10 days Sun 1/1/23 Thu 1/12/23
3 Reuirment Analysis 15 days Fri 1/13/23 Thu 2/2/23 2
4 Requirment Specificatic 5 days Fri 2/3/23 Thu 2/9/23 3
5 Negotiation 4 days Fri 2/10/23 Wed 2/15/23 4
6 preparing product Discription 8 days Thu 2/16/23 Mon 2/27/23 5
7 Identify Problem in Current System 10 days Tue 2/28/23 Mon 3/13/23 6
8 Initial Purposal 7 days Tue 3/14/23 Wed 3/22/23 7
9 UML Diagram 7 days Thu 3/23/23 Fri 3/31/23 8
10 Sequence Diagrams 9 days Mon 4/3/23 Thu 4/13/23 9
11 System Design 35 days Fri 4/14/23 Thu 6/1/23
12 Architectural Design 9 days Fri 4/14/23 Wed 4/26/23 10
13 Database Design 9 days Thu 4/27/23 Tue 5/9/23 12
14 Interface Design 9 days Wed 5/10/23 Mon 5/22/23 13
15 Component Design 8 days Tue 5/23/23 Thu 6/1/23 14
16 Implementation 30 days Fri 6/2/23 Thu 7/13/23
17 Implementation Doctor panel 10 days Fri 6/2/23 Thu 6/15/23 15
18 Implementation Receptionist panel 10 days Fri 6/16/23 Thu 6/29/23 17
19 Implementation Administartor panel 10 days Fri 6/30/23 Thu 7/13/23 18
20 Validation 42 days Fri 7/14/23 Mon 9/11/23
21 Review Processes 19 days Fri 7/14/23 Wed 8/9/23 19
22 System Testing 23 days Thu 8/10/23 Mon 9/11/23 21
Dec 25, '22
Jan 15, '23
Feb 5, '23
Feb 26, '23
Mar 19, '23
Apr 9, '23
Apr 30, '23
May 21, '23
Ready
New Tasks : Manually Scheduled
Sunday, December 25, 2022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March 1
Sat 3/25/23
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May 1
June 1
July 1
August 1
September 1
Fri 9/2
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19, '23
Apr 9, '23
Apr 30, '23
May 21, '23
Jun 11, '23
Jul 2, '23
Jul 23, '23
Aug 13, '23
Sep 3, '23
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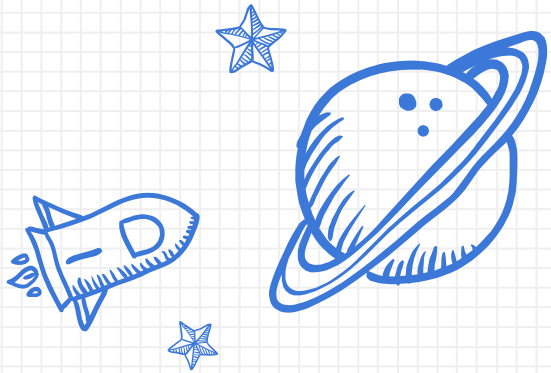
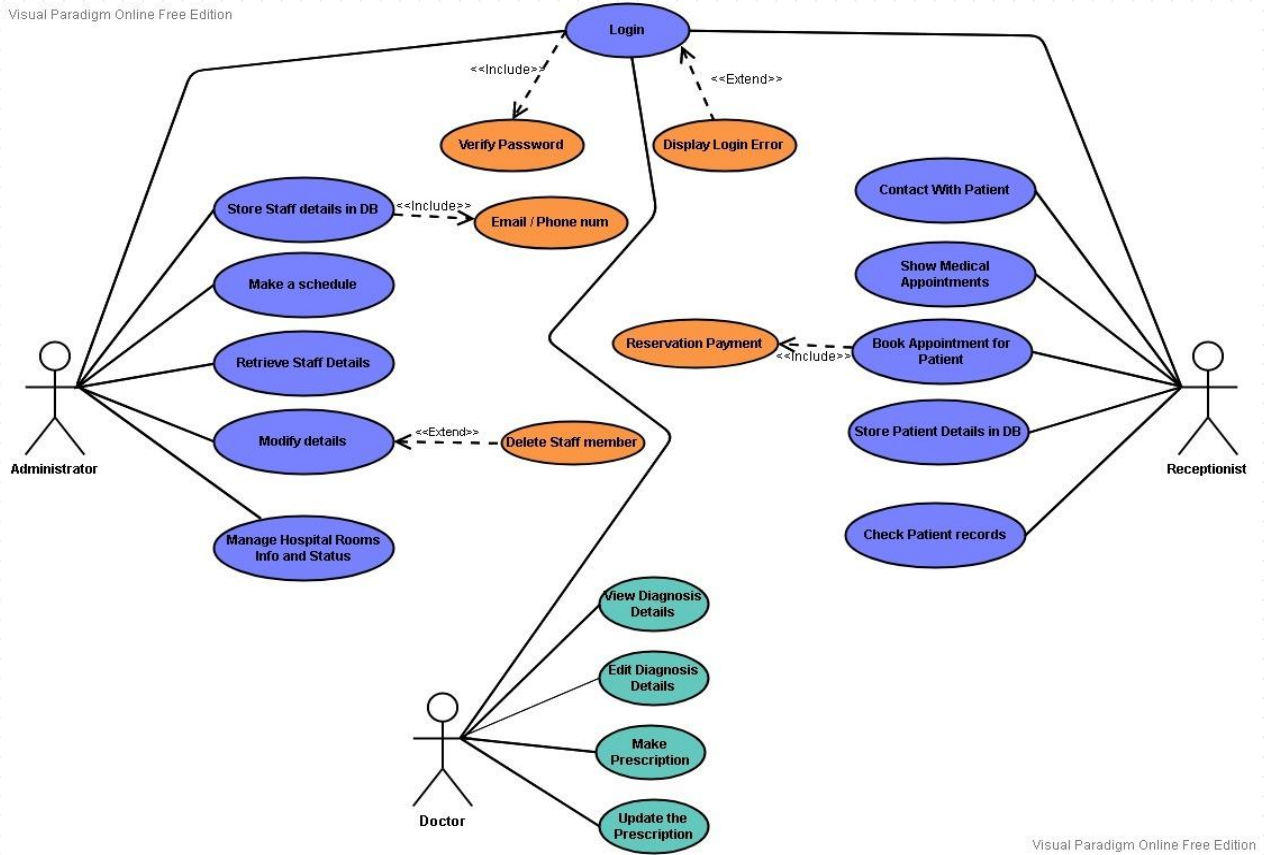
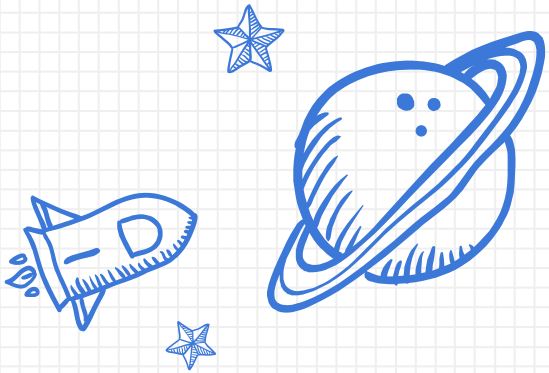


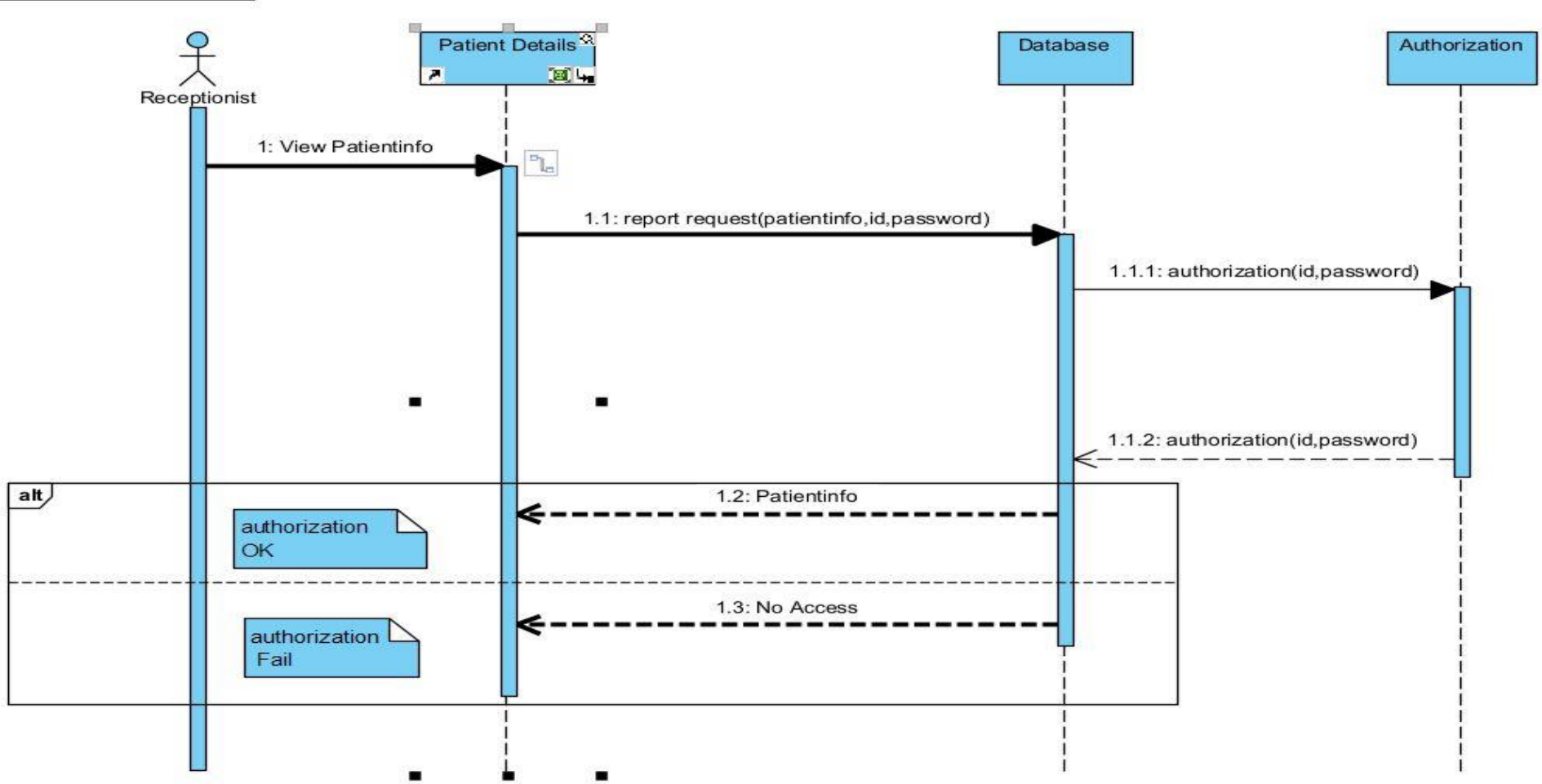
Use Case

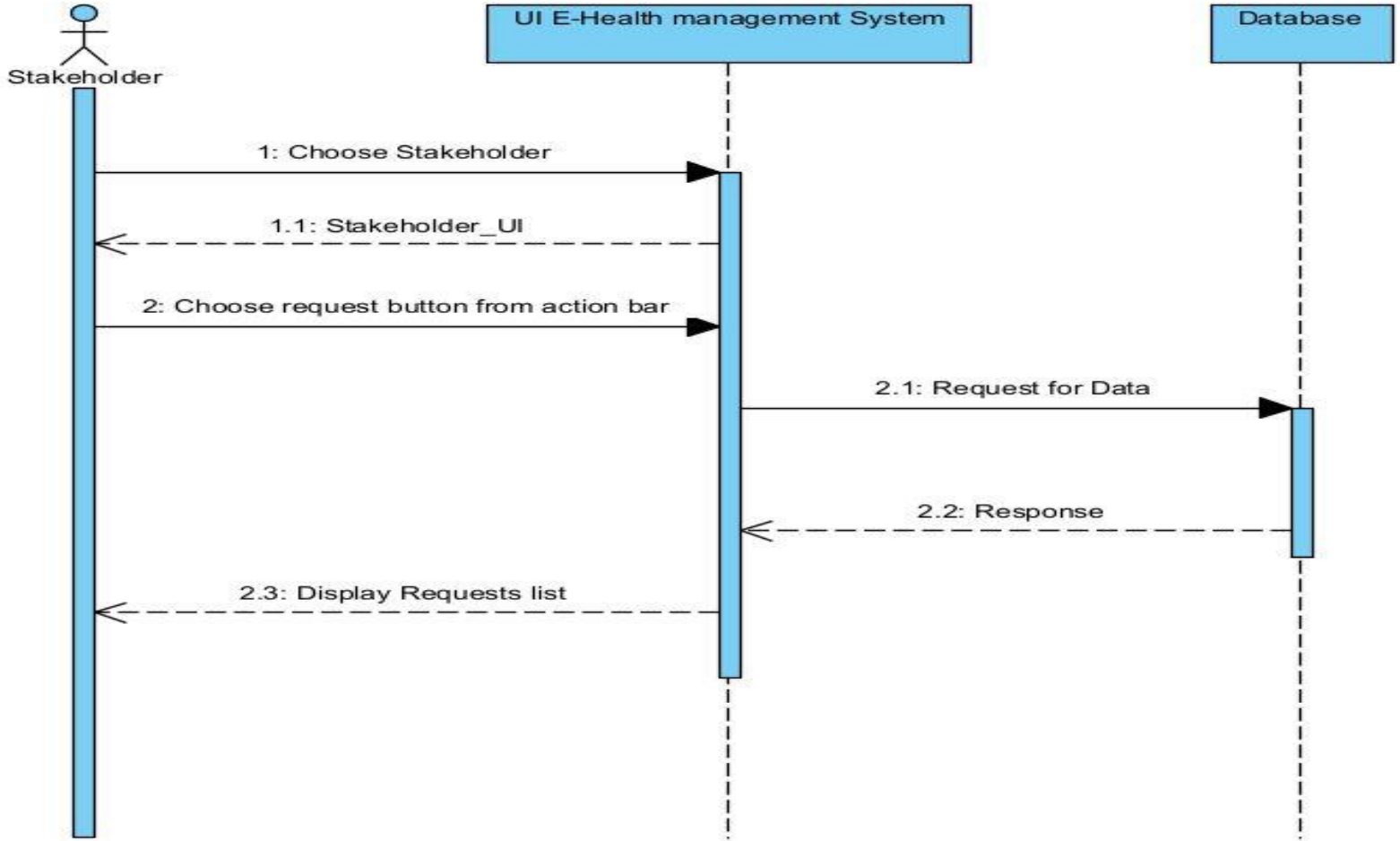
Use Case

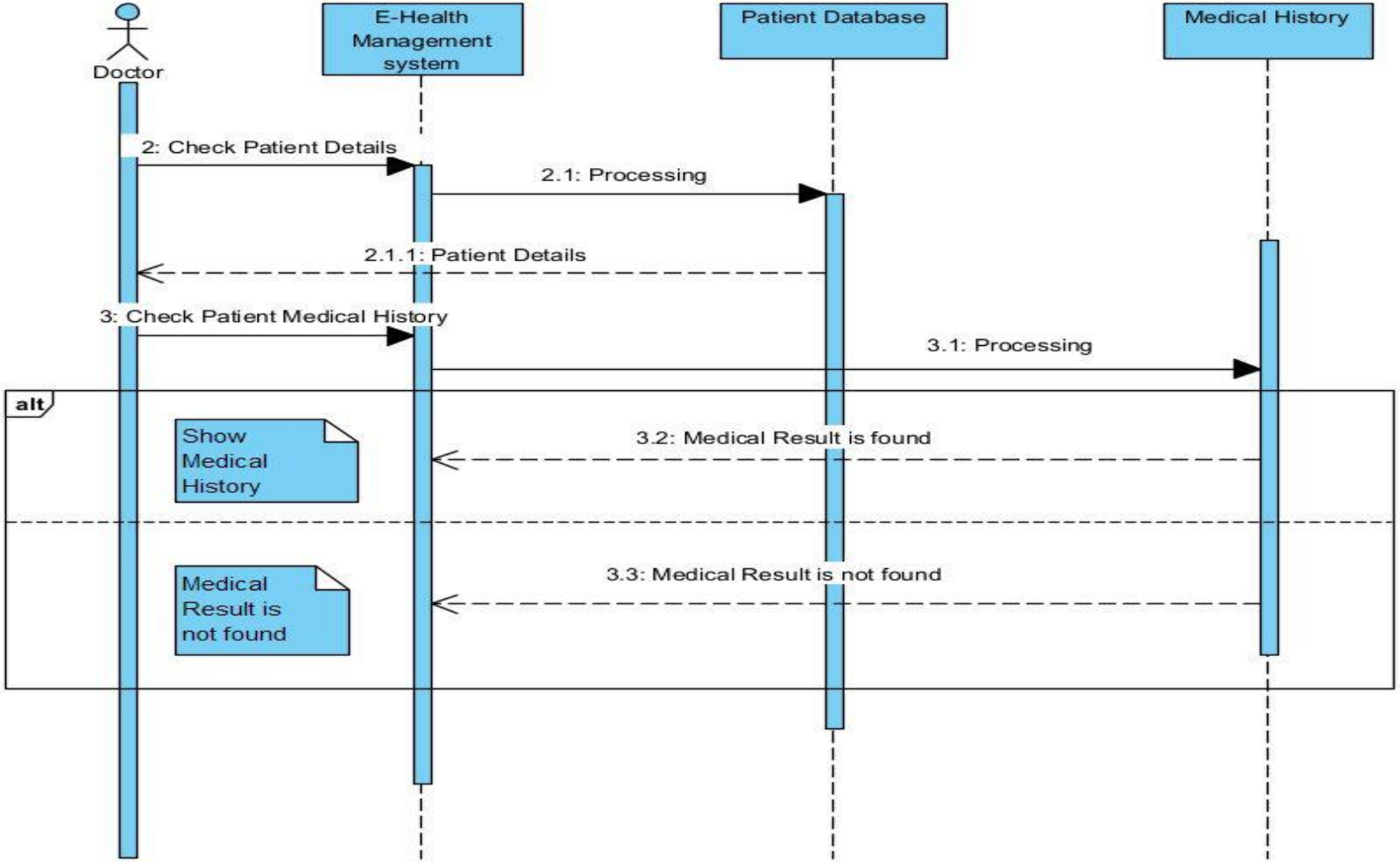

Visual Paradigm Online Free Edition
Login
<<Include>>
<<Extend>>
Verify Password
Display Login Error
Store Staff details in DB
<<Include>>
Email / Phone num
Make a schedule
Retrieve Staff Details
Modify details
<<Extend>>
Delete Staff member
Manage Hospital Rooms Info and Status
Administrator
Contact With Patient
Show Medical Appointments
Reservation Payment
<<Include>>
Book Appointment for Patient
Store Patient Details in DB
Check Patient records
Receptionist
View Diagnosis Details
Edit Diagnosis Details
Make Prescription
Update the Prescription
Doctor
Visual Paradigm Online Free Edition

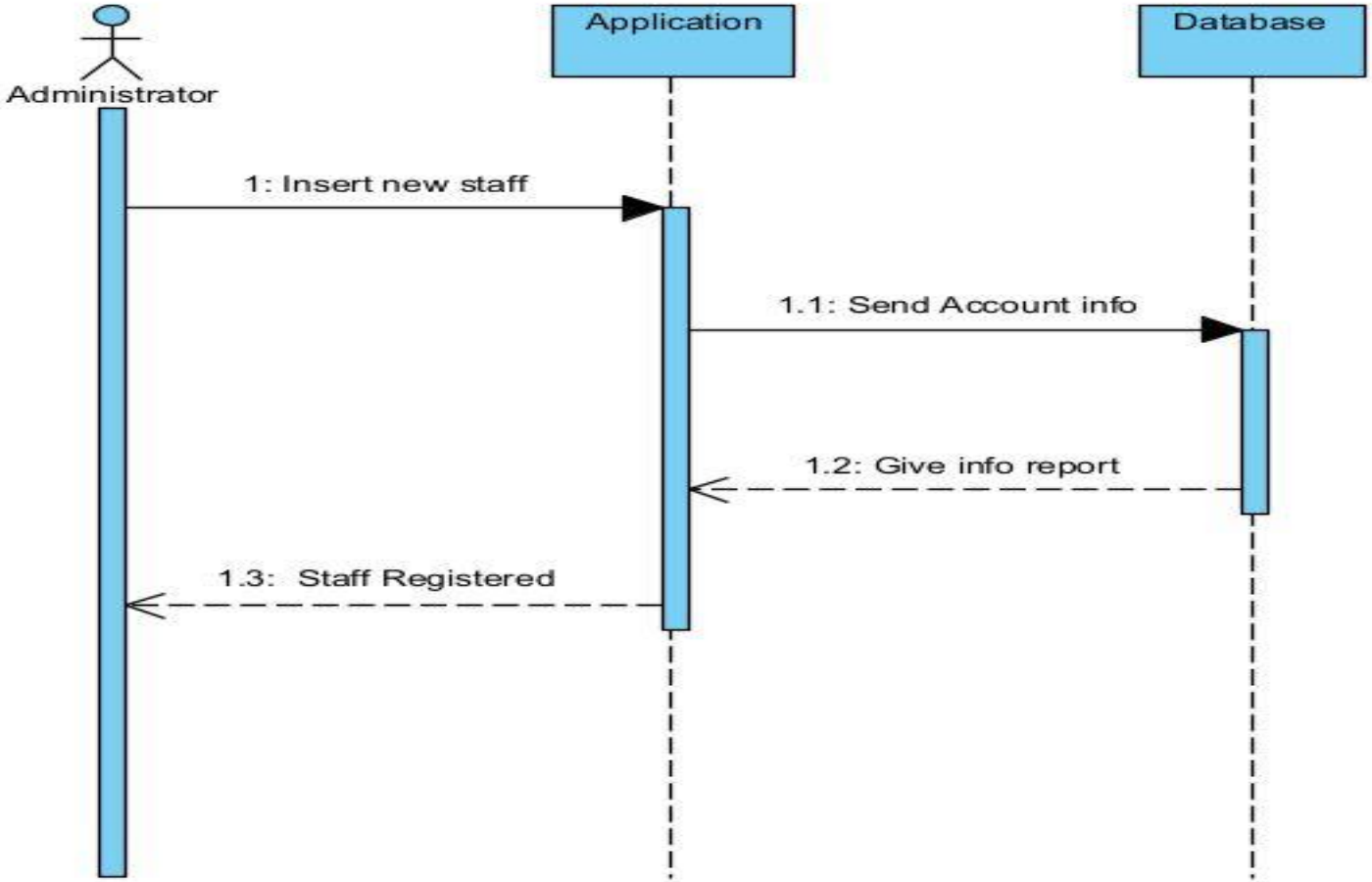


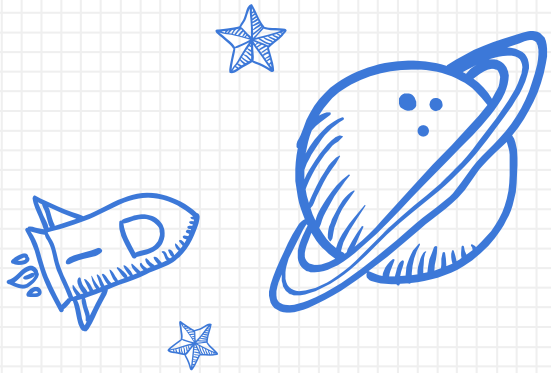
Sequence Diagrams


Receptionist
Patient Details
Database
Authorization
1: View Patientinfo
1.1: report request(patientinfo,id,password)
1.1.1: authorization(id,password)
1.1.2: authorization(id,password)
alt
1.2: Patientinfo
authorization
OK
1.3: No Access
authorization
Fail


Stakeholder
UI E-Health management System
Database
1: Choose Stakeholder
1.1: Stakeholder_UI
2: Choose request button from action bar
2.1: Request for Data
2.2: Response
2.3: Display Requests list


Doctor
E-Health Management system
Patient Database
Medical History
2: Check Patient Details
2.1: Processing
2.1.1: Patient Details
3: Check Patient Medical History
3.1: Processing
alt
Show Medical History
3.2: Medical Result is found
Medical Result is not found
3.3: Medical Result is not found

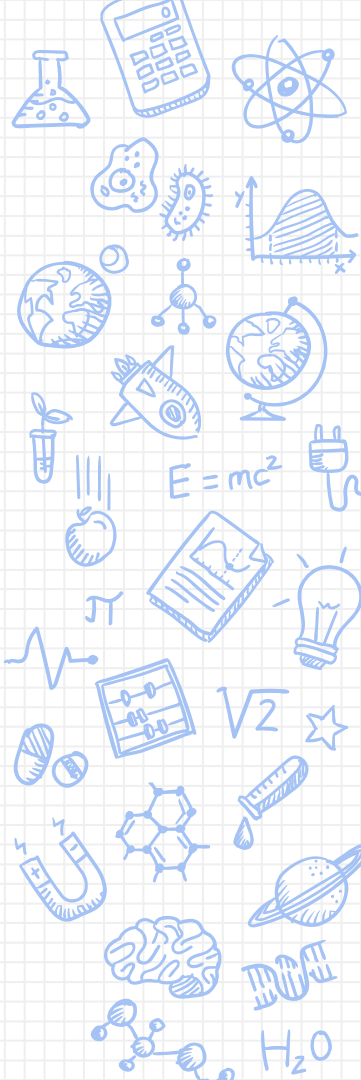

Administrator
Application
Database
1: Insert new staff
1.1: Send Account info
1.2: Give info report
1.3: Staff Registered

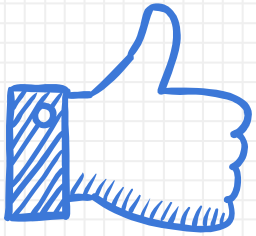


Future Work

Furture Work

- Adding nurses to monitor and diagnose the patient's condition, provide him with physical, psychological and emotional care, and teach him how to take care of himself.
- Add more doctors in all specialties to help the largest number of patients.
- Adding new updates to the program in order to help the patient deal with the program better and easier.
- Adding an online pharmacy helps the patient to order medicine from home.
- Adding translators to facilitate interaction between patients and doctors from all countries of the world.





THANKS!

Any questions?