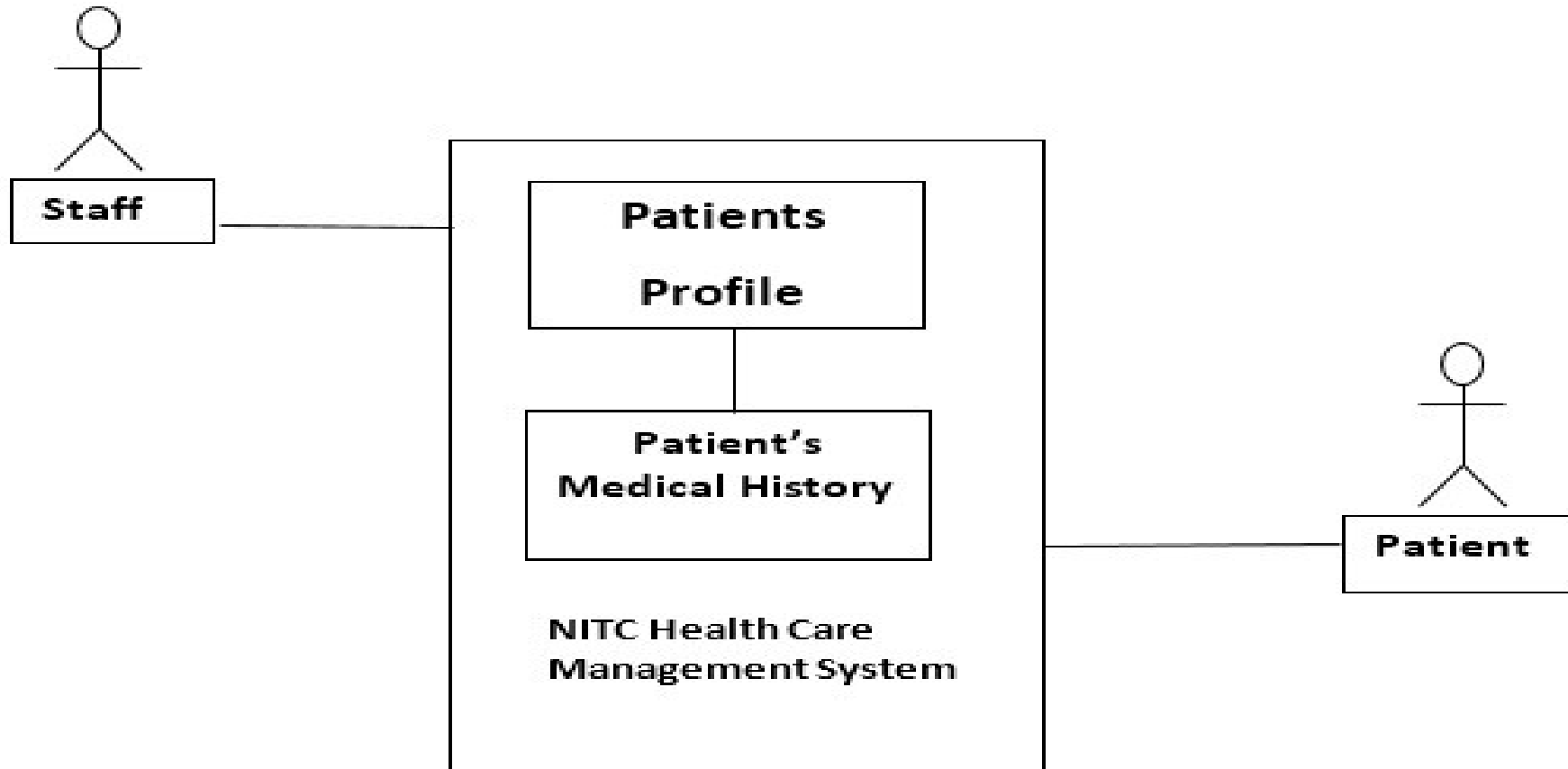


3. Requirements

3.1. Functional Requirements

Overall Description



The **NITC Health Centre Managment System** has 2 types of users, namely *Staff* & *Patient*. There are 4 kinds of Patients namely *Students*, *Faculties*, *NITC Staff* & *Outside Patients*. Each patient details is maintained by the HC Staff & the Patient can only view his details.

3.1.1. Add/Update Medical Details



- **Brief Description:**

- The HC Staff has the privilege of Adding & Updating Medicine details & Test report

- **Step by Step Description:**

The Staff has already logged into his profile using his ID & password

- The HC Staff Selects to *ADD MEDICINE*

- Medicine Prescribed Details
- Test Prescribed
- Date of NEXT VISIT
- Additional Comments

- The HC Staff Selects to *ADD LAB TEST REPORT*
 - Tests Taken
 - Result of Tests
 - Additional Information

3.1.2 Add/Update/Delete Patient Details



- **Brief Description**

- The HC Staff can Add a new patient by filling in the details in the form, later he can Update this information & finally when the Patient is no longer a part of NITC the profile of the patient can be Deleted

- **Step By Step Description**

The Staff has already logged into his profile using his ID & password

- The HC Staff can select *ADD PATIENT*
 - *Add ID no.*
 - *Add type*

3.1.2 Add/Update/Delete Patient Details



- **Brief Description**

- The HC Staff can Add a new patient by filling in the details in the form, later he can Update this information & finally when the Patient is no longer a part of NITC the profile of the patient can be Deleted

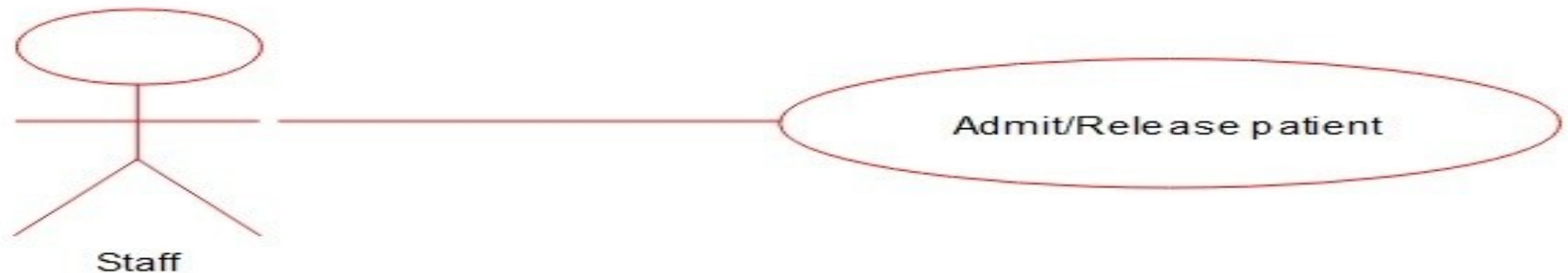
- **Step By Step Description**

The Staff has already logged into his profile using his ID & password

- The HC Staff can select *ADD PATIENT*
 - *Add ID no.*
 - *Add type*

- Student
 - NITC Staff
 - Faculty
 - Outside Patient
- Add Name [optional]
- Add Contact Details [optional]
 - Phone no.
 - Email Id
- Blood Group [optional]
- Gender [optional]
- The HC Staff Can select *UPDATE PATIENT DETAILS*
- *THE HC Staff can select DELETE PATIENT PROFILE*

3.1.3 Admit / Release Patient



- **Brief Description**

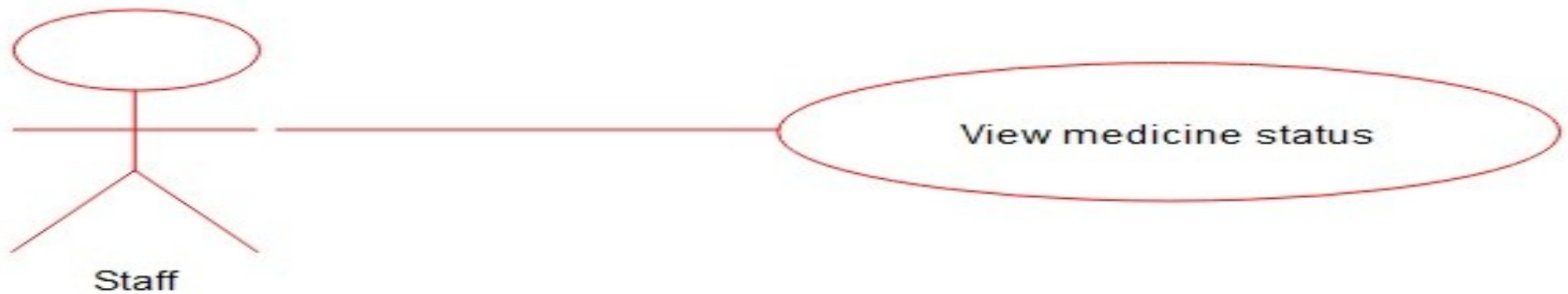
- The HC Staff can Admit a patient incase of Chicken Pox & later after Recovery of the patient , he can Release the patient.

- **Step By Step Description**

The Staff has already logged into his profile using his ID & password

- The HC Staff can select *ADMIT PATIENT*
 - Add ID no.
 - Entry Date
 - Docter in Charge
- The HC Staff can select *RELEASE PATIENT*

3.1.3 View Medical Status

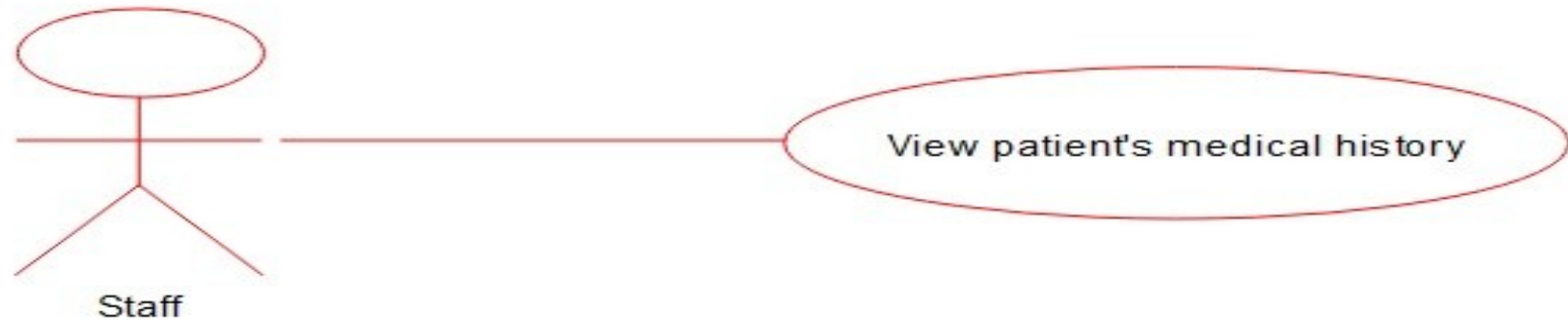


- **Brief Description**
 - The HC Staff can View The Medicine Status of all the Medicines that have been prescribed to the patients on a monthly basis
- **Step By Step Description**

The Staff has already logged into his profile using his ID & password

 - The HC Staff can select *VIEW MEDICINE STATUS* by :
 - *Monthly Analysis*
 - *Yearly Analysis*

3.1.4 View Patients Medical History



- **Brief Description**

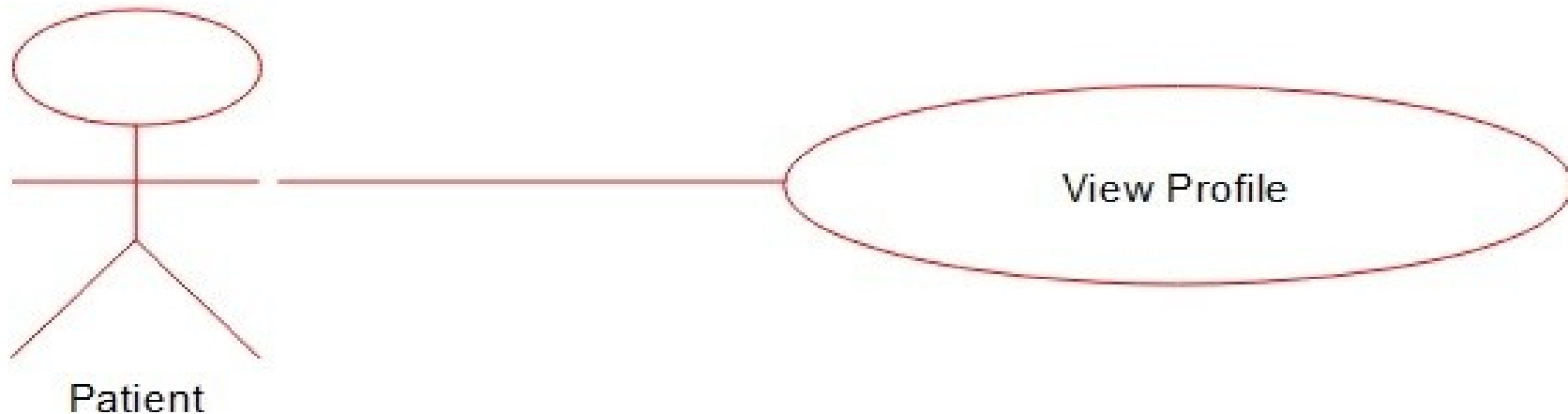
- The HC Staff can View The Medical Details of the Patients by just typing in the ID no. Of the Patient

- **Step By Step Description**

The Staff has already logged into his profile using his ID & password

- The HC Staff can Select *VIEW PATIENT MEDICAL DETIALS* :
 - *Entering Type*
 - *Entering ID no.*

3.2.1 View Profile



- **Brief Description**

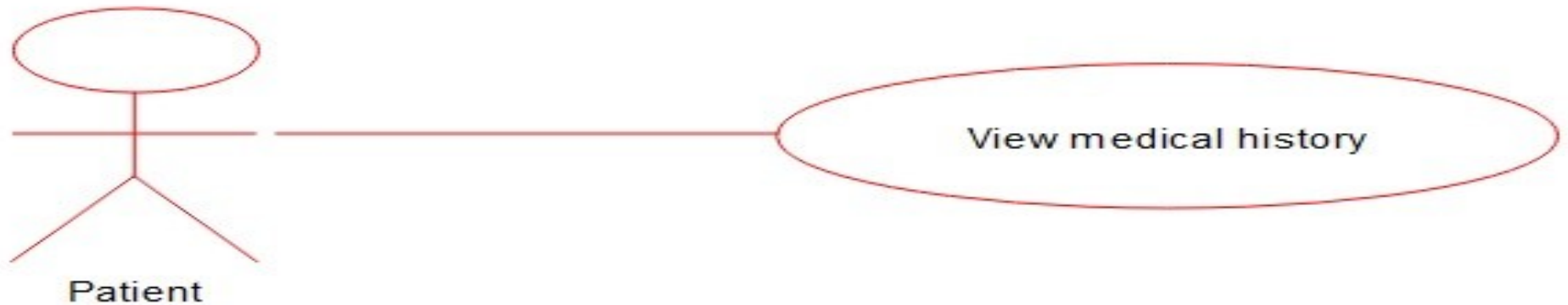
- The Patient can View their own Profile and if there are any changes to be made then he can approach the HC Staff

- **Step By Step Description**

The Patient has already logged into his profile using his ID & password

- The Patient can Select *VIEW PROFILE*

3.2.2 View Medical History



- **Brief Description**

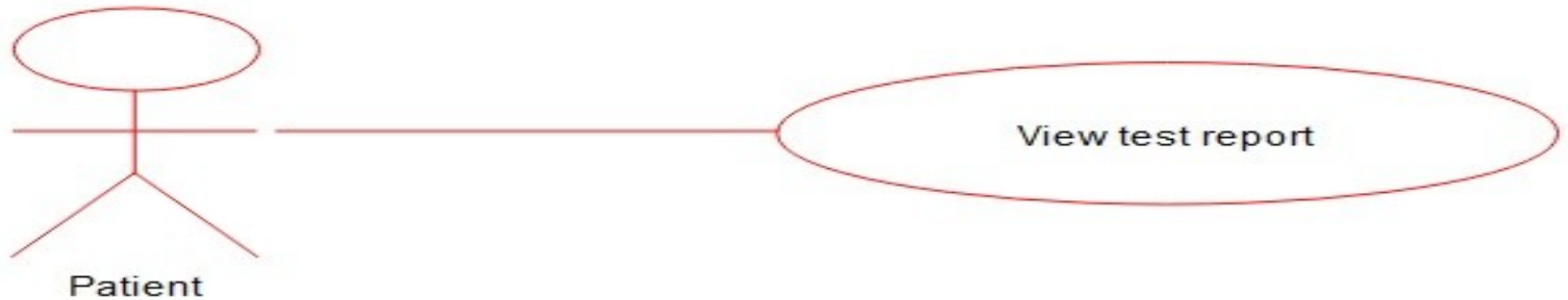
- The Patient can View their own Medical History

- **Step By Step Description**

The Patient has already logged into his profile using his ID & password

- The Patient can Select *VIEW MEDICAL HISTORY*

3.2.3 View Test Report



- **Brief Description**

- The Patient can View their own Test Reports

- **Step By Step Description**

The Patient has already logged into his profile using his ID & password

- The Patient can Select *VIEW Test Reports*

3.3 Functional Requirements at a glance:

3.3.1 The software must request username and password for accessing the system by staff and Doctor, only after authentication they will be allowed.

3.3.2 The System will display Monthly Medicine Status to the HC staff, i.e. The Medicines that have been Prescribed to the patients

3.3.3 The software must allow browsing by the physician or staff of historical medical information of the patients by entering their unique id (Roll no. or NITC ID card no.)

3.3.4 The software must allow patient to view their own medical record on the system and they have privilege to Read only.

3.3.5 The system must only allow deletions by the staff and only after archiving data in flat file format.

3.3.6 The software to be developed must display the correct patient name and details.

3.3.7 The software to be developed must operate without interruption twenty-four hours a day

3.3.8 The system also allows access and entry to limited bloodwork, medication, and allergen information by lab Technician and display results in order specified by operator.

3.3.9 The software must retrieve and sort medical record information and allow for screen and print output of said information.

Note. Print output will include name, roll no and requested diagnostic information only.

3.3.10 The Staff will be able to upload the Health Details of the patient of to the system after they have been diagnosed by the doctor. All the details including:

- Medicines Prescribed
- Tests Prescribed
- Symptom observed
- Preventions to be taken
- Results of any Tests done

3.2 Non-Functional Requirements

3.2.1 The software interface must follow design conventions which allow for easy search of details by the students and other patients. The name and dosage of medicine should properly be mentioned and shown to the patient for their proper intake.

3.2.2 The software must require high levels of error correction and input validation.

Note. Message box prompts the User when they will be entering any wrong or invalid data.

3.2.3 More than five attempts at login and failure will produce a red flag to system administrator.

3.2.4. Details of the Staff present at the health center including the Doctors timing, lab technicians timing etc. will be displayed on the system for easy reference by the patients

3.2.5 Emergency contact no's of nearby Blood banks, Ambulance ,Hospitals and other required technicians will be provided.

3.2.6. The Patients can view other essential Details Like

- Doctor Timings
- Contact Details of Health Centre
- The List of Staff working at the Health Centre

3.2.7 Maintainability

System can be maintained by the Staff easily, as he can make required changes to the system. He can maintain the details regarding the Patient and also the authorized students , faculty , NITC Staff Can view their Medical Details

3.2.8 Portability

The entire system can be implemented in either a Linux based server(Ex:Andromeda) or a Windows based Server. While the system can be used on any machine irrespective of the underlined operating system.

3.2.9 User Interfaces:

Authorized User: user can enter the Login details in the space provided in the Home page. Then the system will redirect them to their respective profile pages, where they can performe their designated tasks, like updating details, Viewing Medical Details etc.
Patient: user can go through the Details Health Centre Staff: Can Update Detials of Medical History,Test results etc.

3.2.10 Hardware Interfaces:

The web portal on which the HCMS will be accessed from, doesn't have any designated hardware, thus it does not have any direct hardware interfaces.

3.2.11 Design constraints

The system will be developed usingJAVA Swing and a MYSQL database.

3.2.12 Reliability

The Entire System is Read Only for the Patients and the Changes can only be made by Authorized staff. The Details can't be changed or tampered upon without the permission of the designated Doctor. The data will be available whenever required by the Patient, Doctor 7 HC Staff.

3.2.13 Availability

The system will be available 9 am to 5 pm (NITC Health Centre Timing), but the Updation of the system can only be done by the HC staff in the end of every working day.

3.2.14 Security

The entire Security of the system depends on the Authenticity of the authorization provided by the Patients and the HC staff while creating user accounts & Updating Details. As this Health Centre management System is to be implemented on a stand alone System the Security of the system depends on the Person accessing the System.

4. Work Done

- Did Literature Surveying
 - Interviewed NITC Health Centre Staff for the present functioning of the health centre
 - Went through different Previous SRS documents of Health Centres [1]
- Created Software Requirements Specifications Using the Literature Survey done.
- Created a GIT HUB account for the present project:
<https://github.com/subhodip-codesmith/NITCHealthCentre.git>
- Members went through a small workshop in using JAVA, which will be the Programming language to be used for implementation.

Things to be Done for NITC HCS :

