**COLLEGE OF BUSINESS AND ECONOMICS**

**SCHOOL OF BUSINESS**

**PROGRAM: BIT LEVEL 2 (HUYE CAMPUS)**

**MODULE: ADVANCED JAVA PROGRAMING**

**NAME: Uwineza Alain Tresor**

**REG NO: 221003656**

**CLASS NO:**

**PROJECT NAME: Clinic Management system**

# **PLANNING**

Clinic Management System is a system enabling hospitals to manage information and data related to all aspects of healthcare. Processes, providers, patients, and more, which in turn ensures that processes are completed swiftly and effectively

Also CMS is a process of implementing all the activities of the clinics and hospitals in a computerized automated way to fasten the performance

**Problem statement**

The problem is the lack of an efficient system for managing patient information and appointments in a clinic setting. This leads to confusion and mistakes, as well as a lack of organization and data tracking. A clinic management system is needed to streamline these processes, increase accuracy and security of patient information, and provide real-time data tracking and reporting capabilities.

# **DESIGN**

In my system I have three users, system admin, doctor, and receptionist. Where system admin is the one who create all other users and he/she also can modify the information for all users and he/she is able to add patient into system

A doctor is able to login into system and view his/her appointments with the patients.

The receptionist is able to add new patient into system and also to modify her/his information and he/she also able to make appointment between doctor and patient

**DEVELOPMENT**

**How I build my entire system (front end-backend technologies), chosen libraries, platforms, storage and databases, adopted technologies are:**

* I developed my project backend and frontend parts by using **java programming language** in integrated development environment (IDE) called net **beans IDE.**
* For backend part I used MYSQL as Database management system to store data of system.
* For frontend parts, I used swing control generation from net beans to create tables, labels, and buttons for designing user interface.
* By using java programming language syntaxes I create interaction between user interface components such as buttons, forms.
* we used com.mysql.jdbs\_5.1.5.jar as a library for handling MYSQL connection with the system

# **TESTING**

* Verify that the portal for new patient registration has all the mandatory fields required for registering a patient.
* Verify that after filling the patient details
* Verify that after patient checkup based on the requirement the details are updated in the patient details database.
* Verify that for existing patients based on the application number of the patient, their records are added/updated in the database.
* Verify that the system has an admin for doctors as well.
* Verify that for each doctor’s details like their timings, specialty, fee, patient visited etc is visible to the authorized users.
* Verify that new details of new doctors can be added to the system.
* Verify that the details of existing users can be updated in the system.
* Verify that the doctor’s record can be deleted from the system.
* Verify that the admin has the record of all the equipment, machines and medicines and the same gets updated when used or added to the system.
* Verify that the admin has the same gets updated based on their allotment and departure to patients

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# **DEPLOYMENT**

* Installing MYSQL as database management system for connecting java programs and database.
* Download and configure com.mysql.5.1.5.jar as library handling MYSQL connection. Use portable storage device to transfer project from development computer to the any library’s librarian computer.
* Run a project for starting to use system.