# Patient –

The patient class is the primary user within the system. The patient class encompasses the attributes for the patient visiting the hospital. The patient has an account that contains healthcare medical history, personal data, hospital visits, current appointments/past appointments and emergency alert features under severe cases.

The patient has attributes that include – name, DOB, address, SSN, phone number, insurance, allergies, medical conditions, medical history, chest pain level, nausea pain level, hunger level, anxiety level, stomach pain level, body ache level, preferred doctor and patient ID.

They will be able to directly access the following methods including –

- SubmitMedicalInfo() – Takes in current medical data such as insurance information to store for the user.
- RequestAppointment() – Allows the user to schedule an appointment with a preferred doctor on a specific date.
- ManangeAppointment() – Allows the user to view the currently scheduled appointments as well as remove and update current appointments.
- CancelAppointment() – Remove a current appointment in queue.
- SendIPIMSAlert() – Alert that tells the hospital there is a patient emergency.
- Login() – Allows the patient to access their control panel.

# Doctor –

The doctor class is the employee class encompassing the doctors who work within the hospital. They will have access to features that involve managing appointments, resolving patient conflicts, viewing emergency alerts, prescribing medication and accessing lab report data.  The doctor has attributes that include – name, type of doctor and employee ID.

They will be able to directly access the following methods including –

- ViewEmergencyAlerts() – Views the alerts that were sent by the IPIMS or patient
- AccessPatientCase() – View the scheduled appointment requested by the patient.

- EPerscribeMedication() – Send a prescription to the pharmacy that the patient needs.
- UpdateHealthConditions() – Update the resolution of the case of the patient.

# Nurse –

The nurse class will encompass the features of the nurse such as updating the health conditions of the patient that is admitted into the hospital.  The nurse will consist of the following attributes – name and employee ID.

They will be able to directly access the following methods including –

- UpdateHealthConditions() – If the patient saw the nurse instead of the doctor, they will be able to update the health conditions/concerns of the patient in question.

# HSP Staff –

The HSP staff will be responsible for admitting patient accounts into the system, uploading & updating records, retrieving patient information and running reports. They will have the following attributes – name and employee ID.

They will be able to directly access the following methods including –

- UploadMedicalReports() – Upload the medical report history of the patient in question.
- UpdateMedicalHistory() – Append medical report history to the patients current history.
- RetrievePatientInfo() – Ability to query patients that live within the IPIMS system.
- RegisterPatientInfo() – Admit a new patient into the IPIMS.
- GenerateEntireStatsReport() – Run all the statistical reports in the IPIMS.

# Lab Staff –

The lab staff are employees of the hospital that have access to lab-specific features of the IPIMS. This includes uploading, editing and managing lab records for patients that are apart of the IPIMS system. They will have attributes consisting of name and employee ID. They will have access to the following methods –

- UploadLabReport() – Ability to upload report data generated for each patient in question

- ViewLabReport() – Ability to view previously generated report data

- EditLabReport() – Ability to see and edit current information in the lab report

## Admin User –

The sole purpose of the admin user class is to enable the manage the accounts of employees that work for the hospital such as nurses, doctors, HSP staff and lab staff.  They will have the attributes of name and employee ID.

This user will have access to the following methods.

- addEmployeeData() – Will register a new employee from the hospital into the system.