Mini Project Report

on

HOSPITAL MANAGEMENT SYSTEM

Submitted by

SRN: PES1UG19CS318   NAME:P Shreya

SRN: PES1UG19CS322   NAME:P Sathwika

1: Brief Description of the project

Objectives:

Hospital management system is important for helping hospitals optimize the overseeing of operations. It allows healthcare practices to be structured better and makes delivery of services smooth and effective. Maintaining records of patients can be tedious, but having an efficient management system can reduce a lot of these burdens.
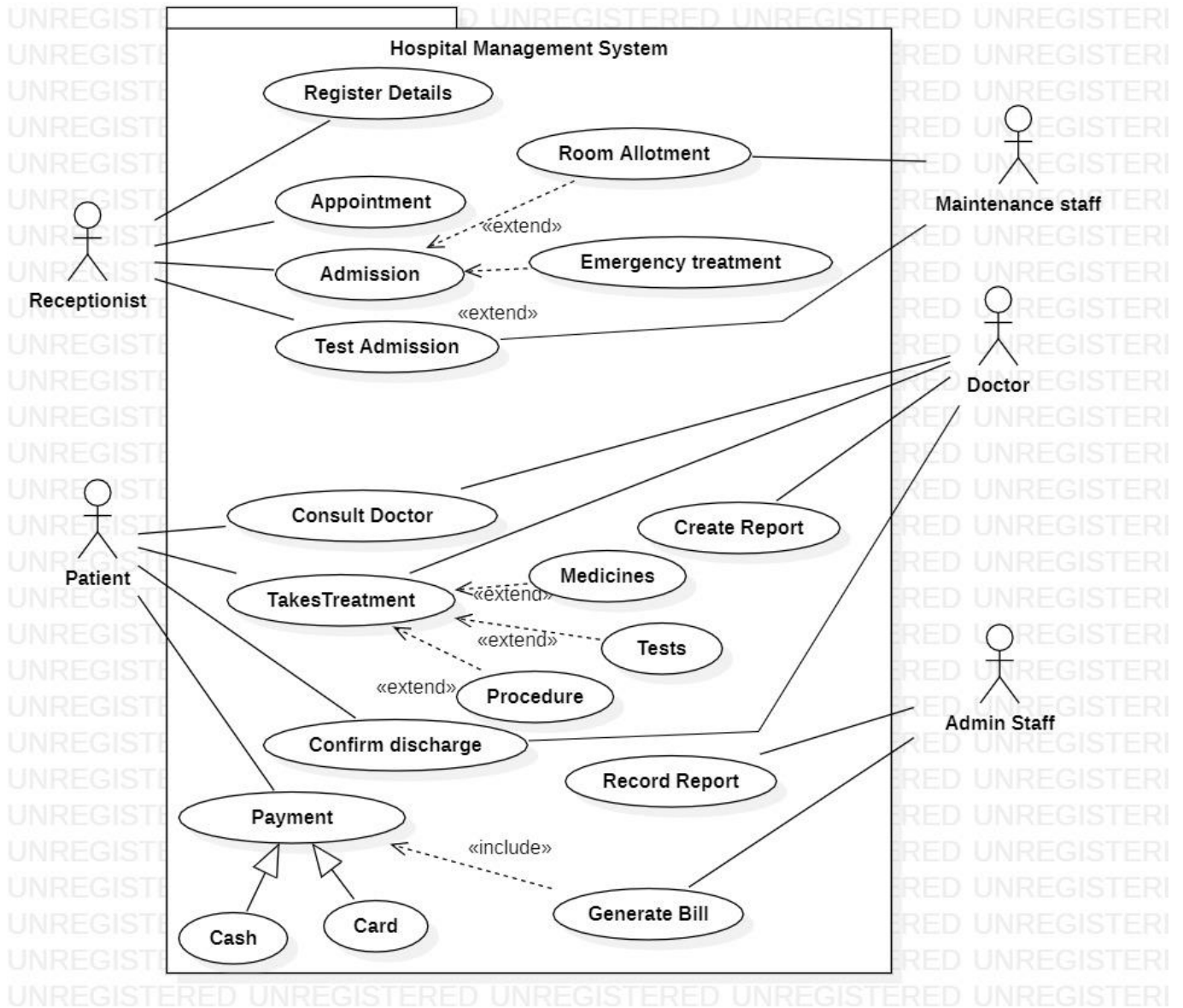
Description:

- The system aids the hospital staff in maintaining employee and patient records, and checking details pertaining to patient treatments (for ex: Room availability and allotment, doctors present).
- Patients can book an appointment or go to the hospital directly, and once their treatment is complete a bill is generated, and they make payment in their preferred way.
- Admin staff are mostly responsible for a number of required processes, which mostly involve recording info, providing required resources and also the transaction process.
- Maintenance staff takes care of all required equipments and resources that a patient needs or uses.
- Doctor first holds a consultation session, then suggests treatment accordingly, which includes both prescribing medicines or recommending required procedures to be followed.

  Note: Procedure can refer to one out of a wide array of options, ranging from something as simple as injections to ones as critical as major surgeries, depending on the patient's condition.

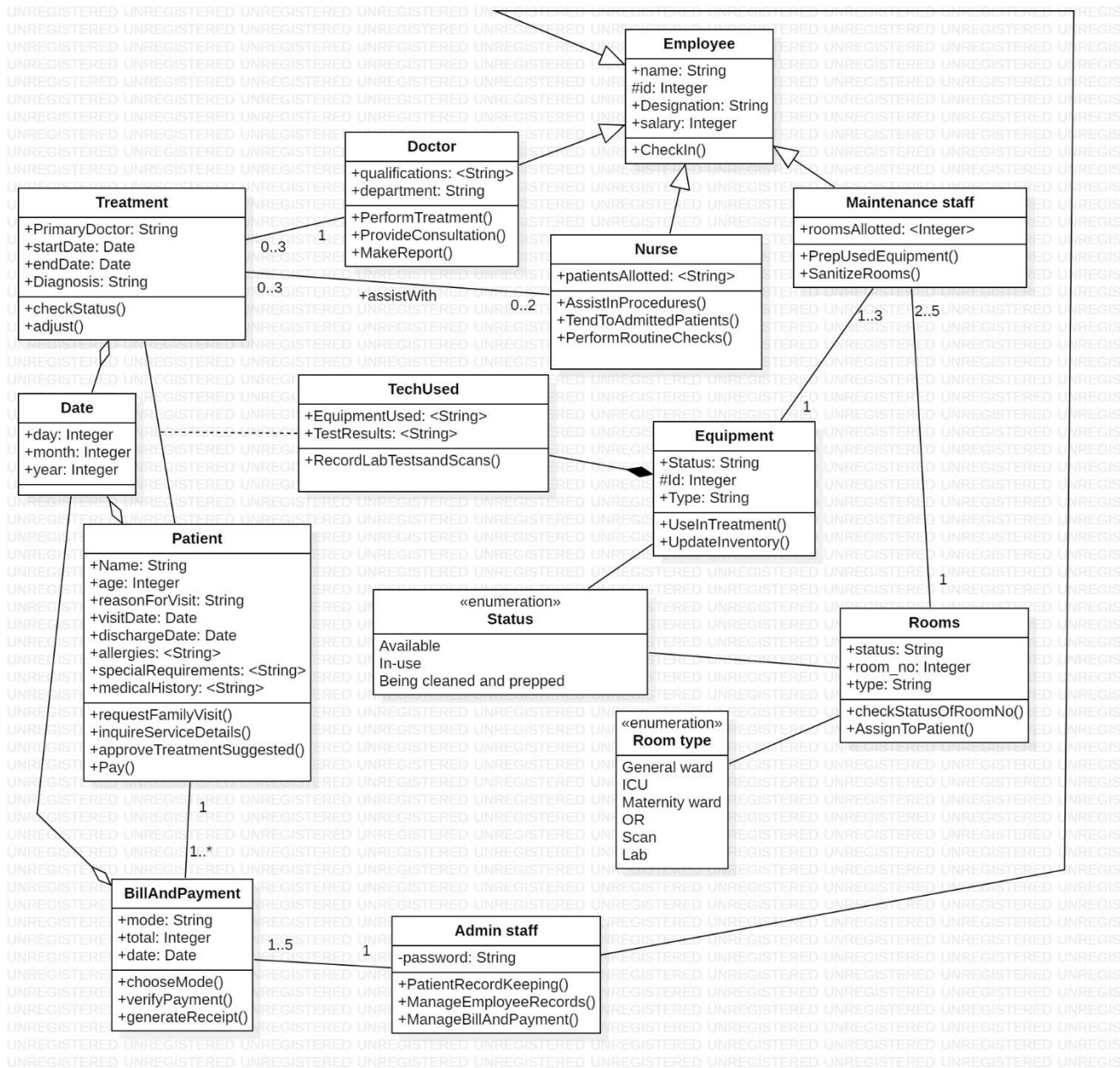**Functionality:**

- Keeps a record of patients, their transactions and their reports.
- Documents the involvement of doctors and nurses in treatments.
- Assists in notifying maintenance staff to check everything before a specific treatment begins.
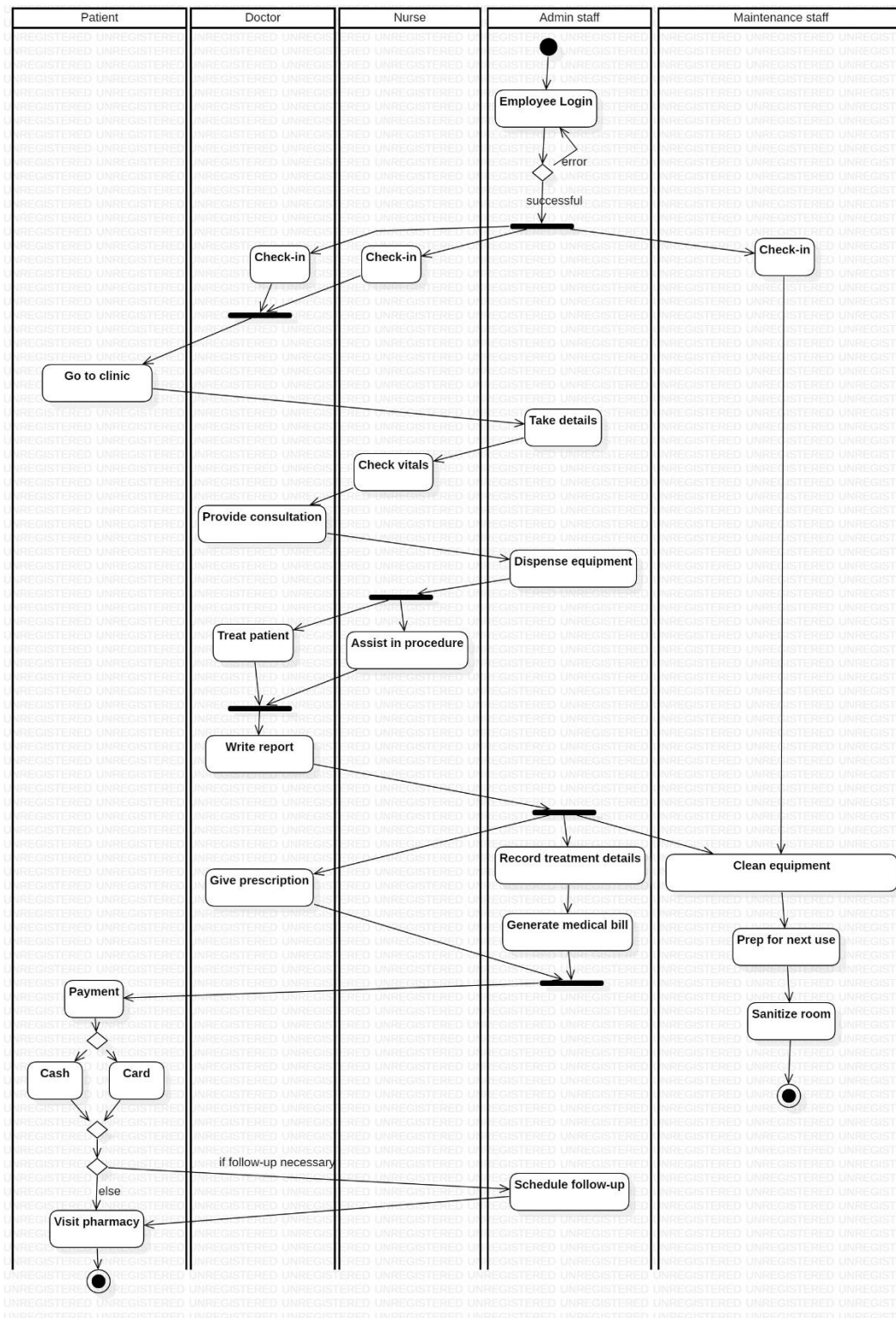- Maintenance of records of the rooms being booked, hospital resources, etc.

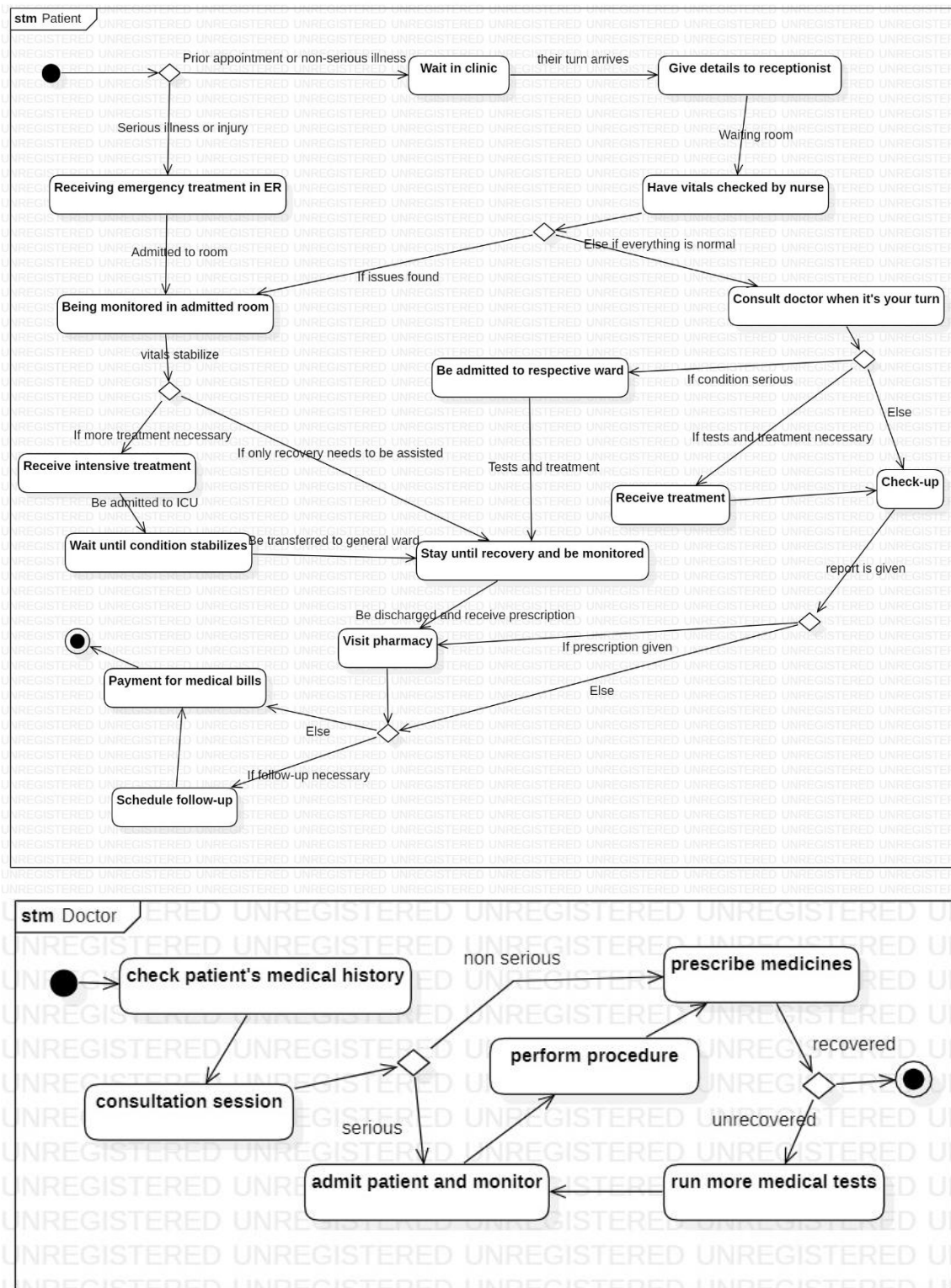**2: Use Case diagram:**

3: Class Diagram:

4: Activity Diagram:

5: State Diagrams of Patient and Doctor

stm Patient

- Prior appointment or non-serious illness → **Wait in clinic** → their turn arrives → **Give details to receptionist**
- Serious illness or injury → **Receiving emergency treatment in ER**
- Waiting room → **Have vitals checked by nurse**
- Admitted to room
- Else if everything is normal
- If issues found → **Being monitored in admitted room**
- **Consult doctor when it's your turn**
- vitals stabilize
- **Be admitted to respective ward** ← If condition serious
- Else
- If more treatment necessary
- If only recovery needs to be assisted
- If tests and treatment necessary
- **Receive intensive treatment**
- Tests and treatment
- **Check-up**
- Be admitted to ICU
- **Receive treatment**
- **Wait until condition stabilizes** — Be transferred to general ward — **Stay until recovery and be monitored**
- report is given
- Be discharged and receive prescription
- **Visit pharmacy** — If prescription given
- **Payment for medical bills**
- Else
- Else
- If follow-up necessary
- **Schedule follow-up**

stm Doctor

- **check patient's medical history**
- non serious → **prescribe medicines**
- **consultation session**
- **perform procedure**
- recovered
- serious
- unrecovered
- **admit patient and monitor**
- **run more medical tests**

Division of work among team members:

P Shreya   Class diagram

Activity diagram

State diagram for patient

P.Sathwika   Synopsis

Use Case diagram

State diagram for doctor