Software Requirements Specifications

FOR

HOSPITAL MANAGEMENT SYSTEM

TEAM DETAILS:

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INTRODUCTION

Hospital management system is a computer system that helps manage the information related to health care and aids in the job completion of health care providers effectively. HMS was introduced to solve the complications coming from managing all the paper works of every patient associated with the various departments of hospitalization with confidentiality. HMS provides the ability to manage all the paperwork in one place, reducing the work of staff in arranging and analyzing the paperwork of the patients.

PURPOSE

A Hospital Management System (HMS) is a software system that is designed to help hospitals manage different aspects of their operations. It helps hospital staff to keep track of patient records, appointments, billing, and staff. By using an HMS, hospitals can manage their administrative tasks, reduce paperwork, and automate tasks such as patient registration and billing. This helps to save time and increase efficiency, allowing hospital staff to focus more on providing quality patient care. By using an HMS, hospitals can streamline their administrative tasks, reduce paperwork, and automate tasks such as patient registration and billing. This helps to save time and increase efficiency, allowing hospital staff to focus more on providing quality patient care.

SCOPE

An HMS (Hospital Management System) is a software application that helps hospitals manage various aspects of their operations. Key functions include patient management, appointment scheduling, electronic medical records, inventory management, billing and accounting, laboratory and radiology management, pharmacy management, and analytics and reporting.

PRODUCT FUNCTIONS

HMS allows hospitals to maintain records of patients, including personal details, medical history, and treatments received. HMS allows patients to schedule appointments online and enables hospital staff to manage appointment schedules and update patient records accordingly. HMS allows hospitals to manage employee information, schedules, and payroll, as well as maintain a comprehensive record of employee qualifications and certifications. HMS allows hospitals to generate invoices and manage billing for services provided to patients, including insurance claims and payment tracking. HMS provides healthcare providers with prescription management tools,

including electronic prescription services and drug interaction warnings.

HARDWARE REQUIREMENTS

Server: An HMS typically requires a dedicated server to host the software application and database. The server should have a multi-core processor, sufficient memory, and storage capacity to support the application and database.

Network: The network should be secure and have sufficient bandwidth to support the application's data transfer requirements.

Backup and Recovery: An HMS requires a backup and recovery system to protect data in case of system failure.

Minimal Hardware Specification Requirement:

RAM : 4 GB

STORAGE : 128 GB

Software Requirements :

We are going to use HTML,CSS for frontend development, Django a Python framework for building web applications for backend development and MySQL for the Database management. End user will require a strong internet connection with minimum speed of 500 KBps and a browser in

their Computers or Laptops or mobile phones to access the HMS web application.

FUNCTIONAL REQUIREMENTS

Patient Registration: The system should allow hospital staff to register new patients with their personal and medical details, such as name, age, gender, contact information, medical history, and insurance details.

Appointment Scheduling: The system should allow patients to book appointments with doctors, and hospital staff to schedule appointments for patients. It should also allow rescheduling or cancellation of appointments as per the hospital's policies.

Patient Management: The system should maintain accurate records of patient information, such as diagnosis, treatment plans, and medication prescriptions, and make it accessible to authorized healthcare providers.

Electronic Medical Records (EMR): The system should provide electronic medical records to authorized healthcare providers for a patient's entire medical history, including medical notes, diagnosis, medications, and treatments.

Billing and Invoicing: The system should generate bills and invoices for patient charges, including consultations, treatments, and procedures, and accept payments through different modes such as cash, credit/debit cards, insurance, etc.

Pharmacy Management: The system should manage pharmacy inventory, prescriptions, and dispensing, and maintain records of medicines, including their availability and expiry dates.

Laboratory Management: The system should manage laboratory test orders, results, and reports, including the handling of samples, test requisitions, results, and reports.

Imaging Management: The system should manage imaging orders, results, and reports, including X-rays, CT scans, MRI, etc., and maintain records of images, including their availability and expiry dates.

Employee Management: The system should manage employee schedules, assign tasks, and track performance, including recording of employee attendance, leave, and work shifts.

NON-FUNCTIONAL REQUIREMENTS

User Friendly: The system should be user-friendly and easy to navigate for hospital staff, doctors, and patients.

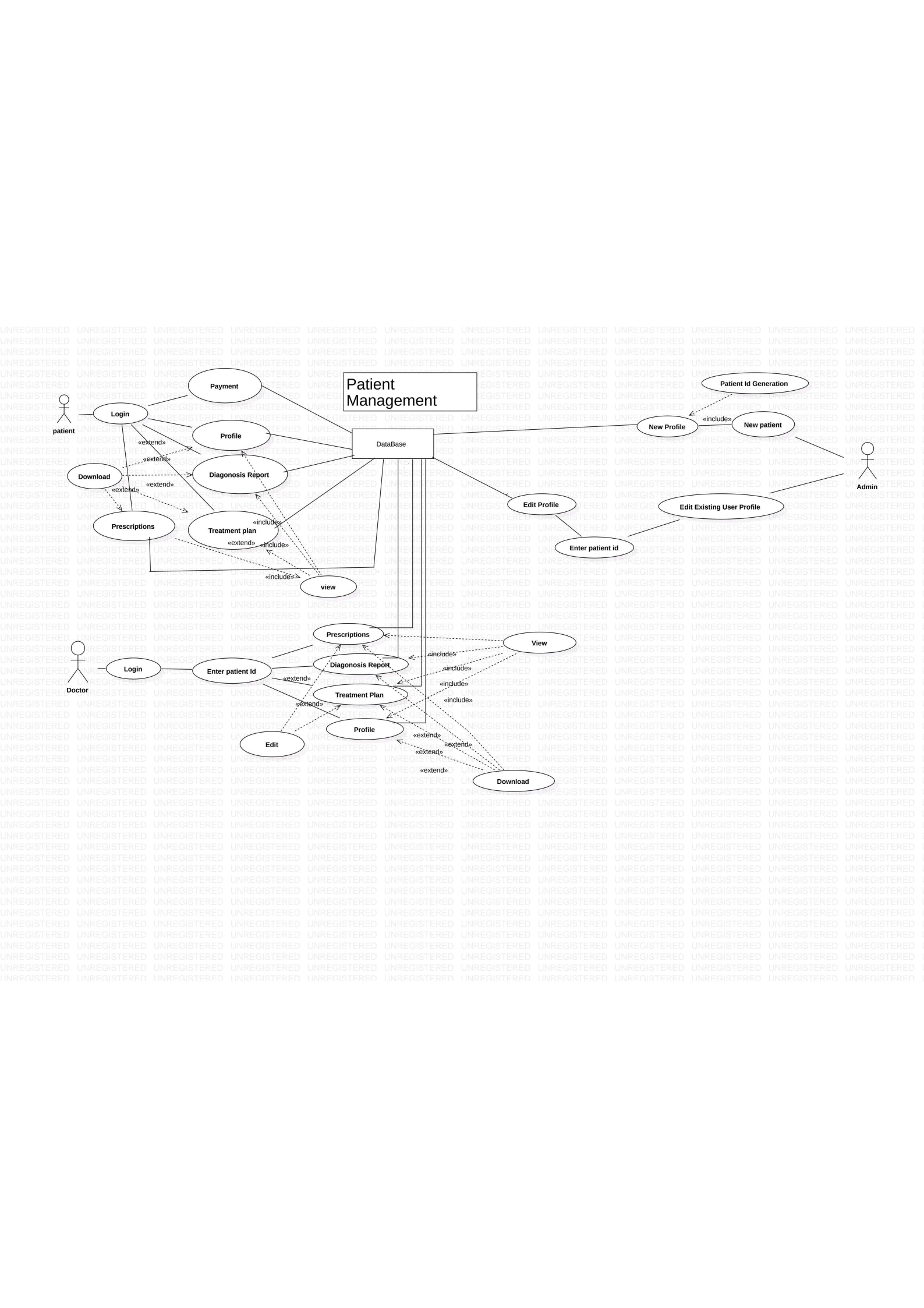
Performance: The system should provide fast and efficient response times to users' requests, without any delays or system downtimes. It should be able to handle a large volume of data and users' requests without any performance degradation.

Scalability: The system should be scalable to handle an increasing number of users, data, and transactions. It should be able to adapt to the changing needs of the hospital, and accommodate future growth and expansion.

Reliability: The system should be reliable and consistent.

Security: The system should provide adequate security measures to protect patient data, including user authentication, data encryption, firewalls, and intrusion detection systems. It should also comply with relevant data protection and privacy regulations.

Support and Maintenance: The system should have a dedicated support team to address users' queries, issues, and feedback, and provide timely software updates, bug fixes, and patches to maintain the system's stability and performance.


Patient Management
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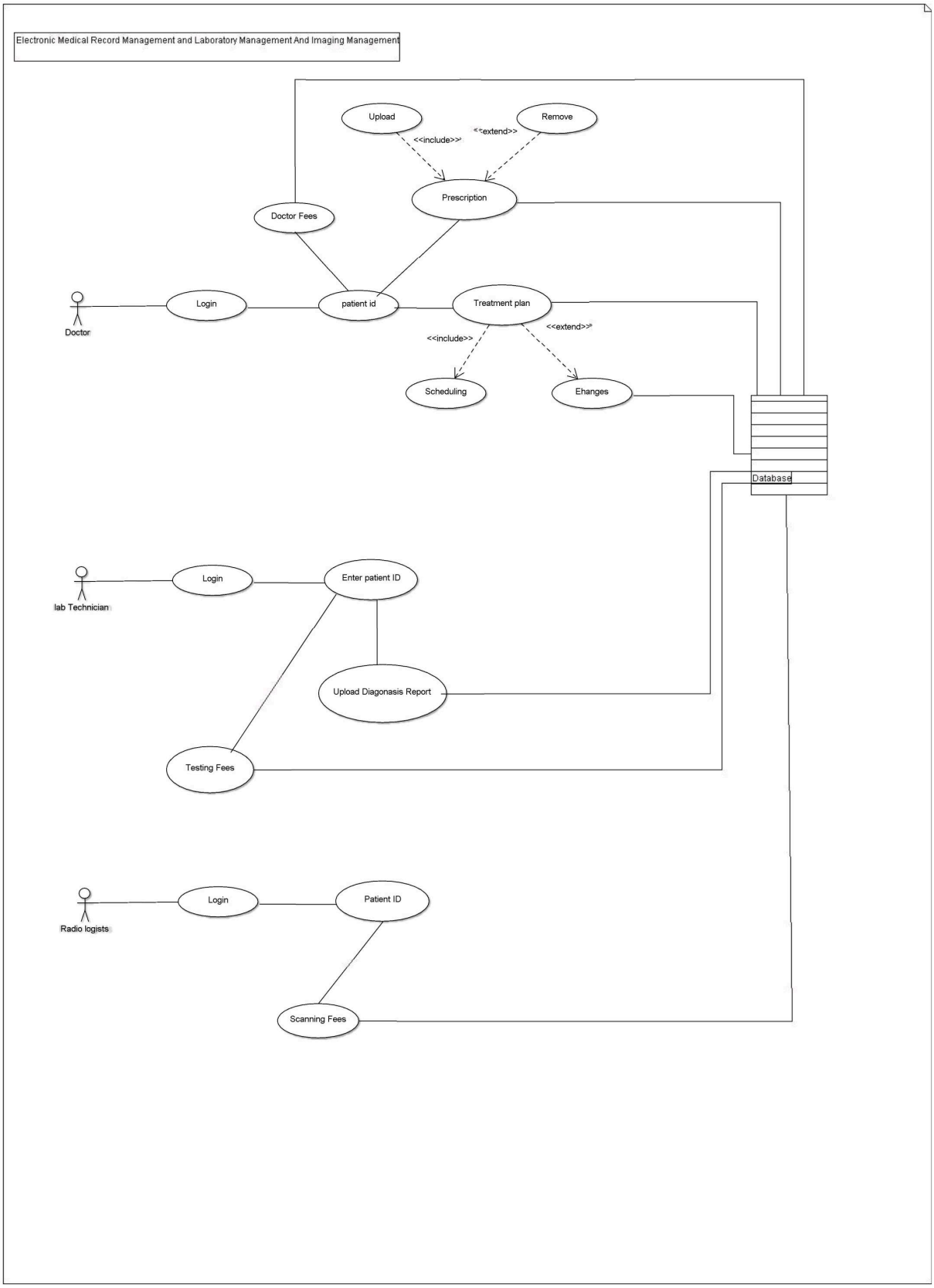
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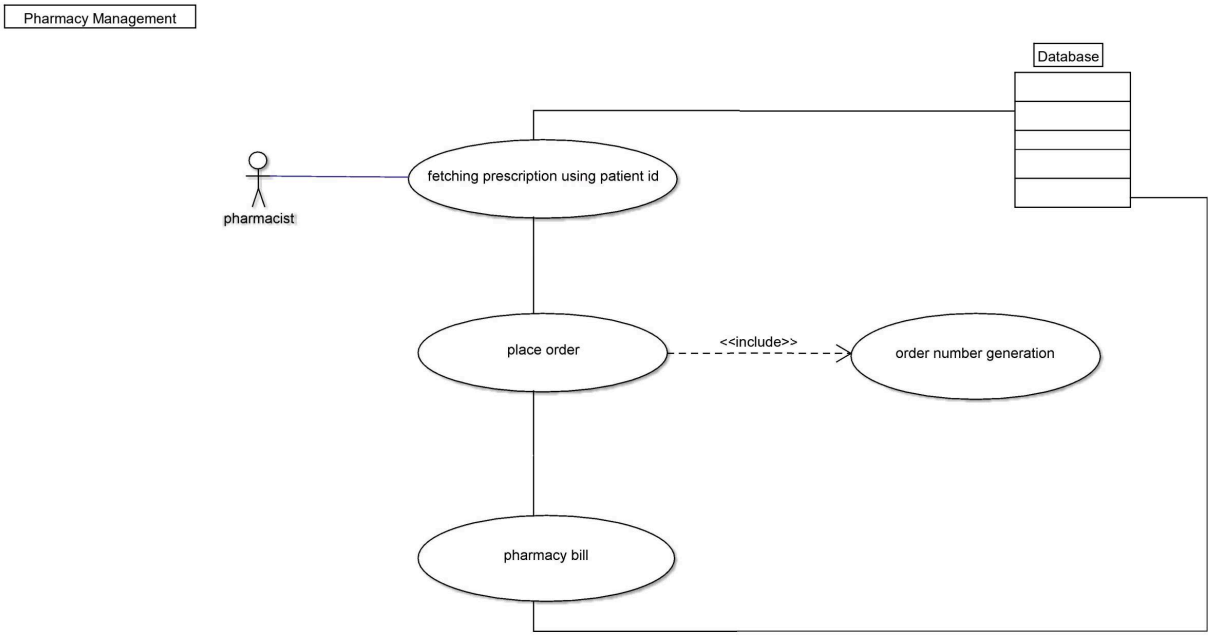
Pharmacy Management
Database
pharmacist
fetching prescription using patient id
place order
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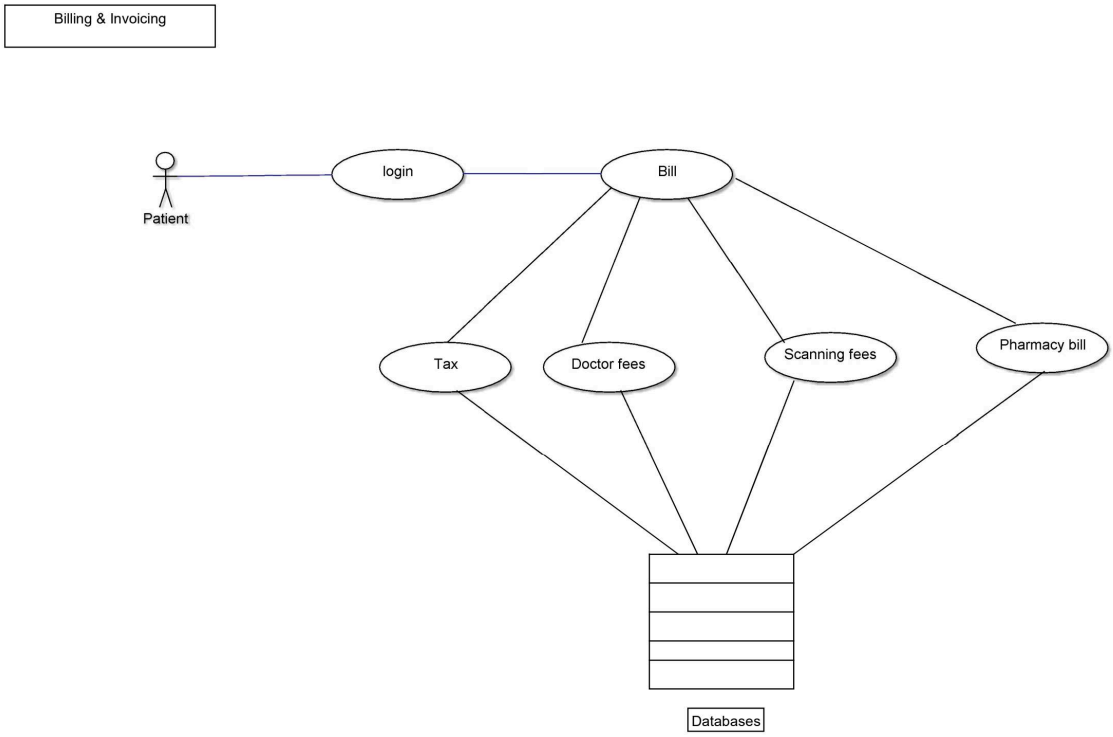
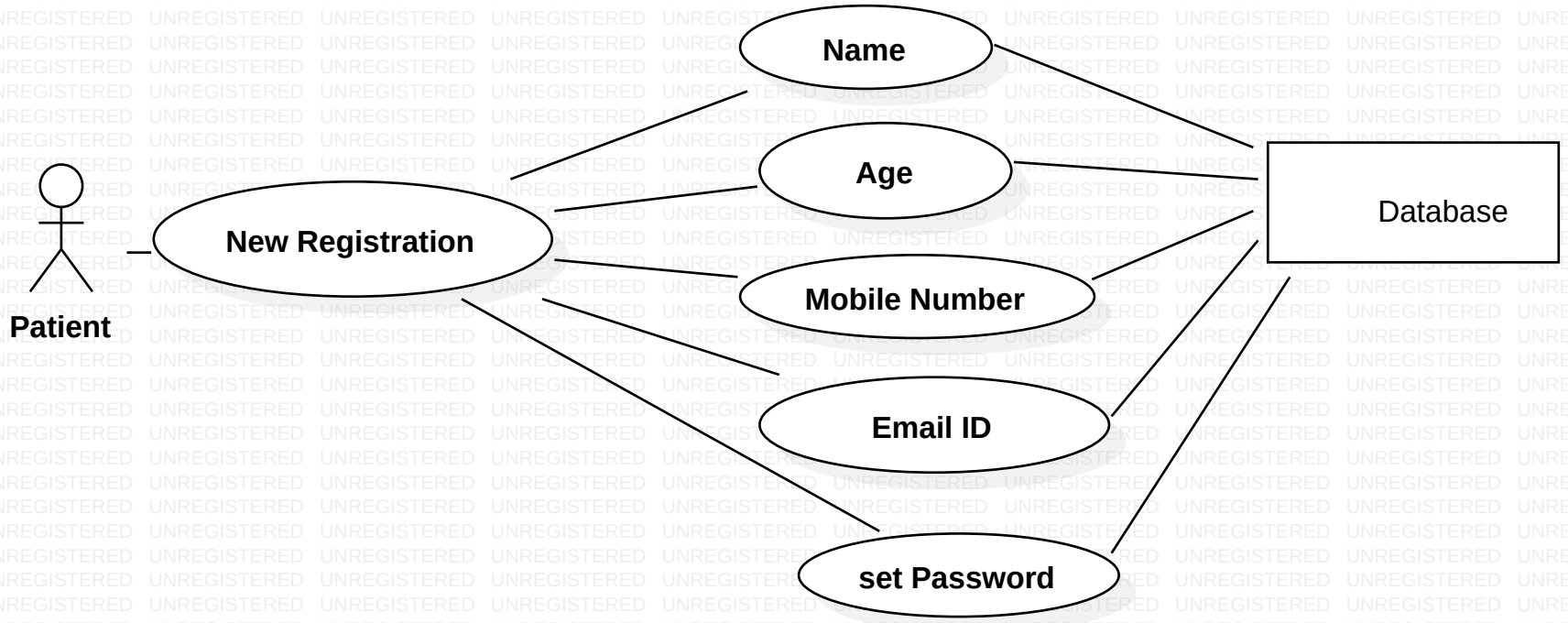
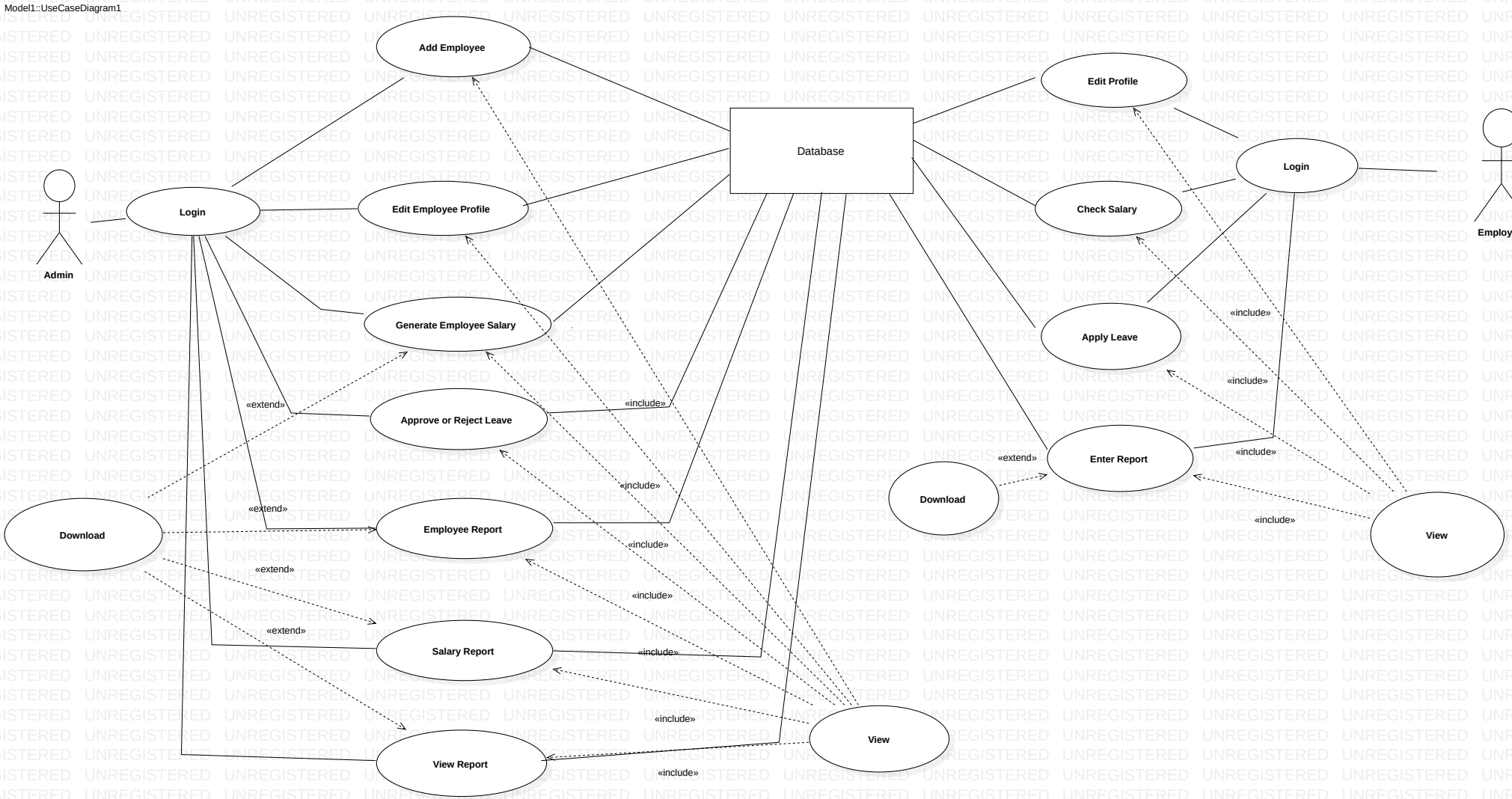
order number generation
pharmacy bill


Billing & Invoicing
Patient
login
Bill
Tax
Doctor fees
Scanning fees
Pharmacy bill
Databases

Patient Registration




Model1::UseCaseDiagram1
Add Employee
Edit Profile
Database
Login
Employee
Admin
Login
Edit Employee Profile
Check Salary
Generate Employee Salary
Apply Leave
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