Software Requirements Specification

(SRS)

for

Sickness Watch

[Kailash Chandra Jindal IV Year, VII Semester, Batch (A4)]

Approval statement and reviewed by Lab In-Charge: I Prof. Suresh Kumar Jha have received the SRS Document from Kailash Chandra Jindal on ...../...../20.....

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1.0 INTRODUCTION

1.1 Scope

This project analyzes the data of patients in hospital and helps in decreasing various diseases which are common in most of the patients living in any particular region. This software uses MySQL for database management which can be easily accessed by authenticated users and admin. Use of servlet for WebApp which makes it easier through graphical interface.

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1.2 Technologies to be used

- Web technology: HTML, CSS, JavaScript, JSP
- API used: JDBC, Servlet
- Database: MySQL
- Programming Language: Java

2.0 GENERAL REQUIREMENTS

2.1 Functionalities

1. **Login panel**

   Before using any services, the user must login with their credentials which have several permissions authenticated to them according to different levels of access.

2. **Database**

   Patient Health Record (PHR) are maintained by using MySQL which are essential to get analyzed data which helps giving us information about diseases in particular region or diseases at a particular duration.

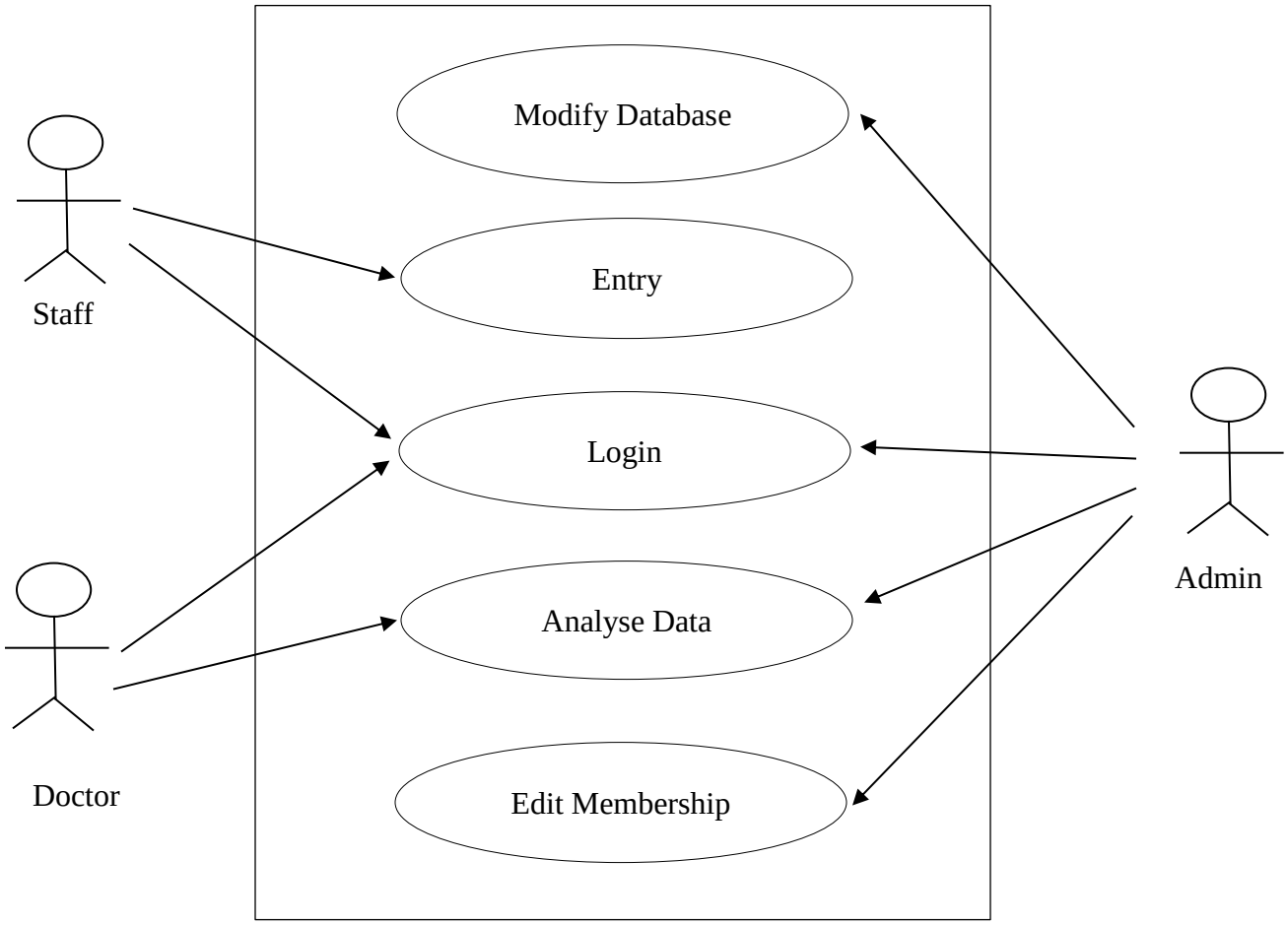
3. **Membership**

   System administrator gives the authority to access or login into the software and use the services permitted to them.

4. **Analyze Data**

   The records saved in the database are analyzed to show details of the diseases spreading in particular region or at particular duration of time.

2.2 Use Case Model Diagrams



2.3 Interfaces

- This web interface is user interactive. The interface is simple, easy to handle and self-explanatory.
- Once opened, user will easily come into the flow with the application and easily uses all interfaces properly.
- However, the basic interface available in our web interface is:
  Login panel.
  Service panel

Software Interface:

- Eclipse IDE
- J2SE
- Apache Tomcat
- Adobe Dreamweaver
- MySQL Workbench 5.2 CE

Communication Interface:

- User can login by password/credentials: there are three different levels of user access authentication which is namely administrator, doctor and staff. User credentials are encrypted through API for concerns regarding security and preventing someone from breaching into the database.

- Doctors get analysed data in single click: records saved in the database are analysed to provide more information about diseases which needs more attention in a duration of time or in region.

- Modification by Administrator: Admin can modify previously saved records and give membership to various members/staff present in the hospital.

2.4 General Constraints

- The system needs to be connected with internet, and the systems are connected to the same network.

- If user is not authenticated by admin and is not given credentials then it will give an error, only permitted users have credentials to login.

2.5 Supplementary requirements

NA.

3.0 Definition, Acronyms, and Abbreviations

- **CSS (Cascading Style Sheet):** It is a style sheet language used for describing the presentation of a document written in markup language.

- **SQL (Structured Query Language):** It is a domain-specific language used in programming and designed for managing data held in a relational database management system, or for stream processing in a relational data stream management system.

- **HTML (Hypertext Markup Language):** It is the standard markup language for creating web pages and web applications. With Cascading Style Sheet and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

- **J2SE (Java Standard Edition):** Java is a general-purpose computer **programming language** that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers **"write once, run anywhere" (WORA)**, meaning that compiled Java code can run on all platforms that support Java without the need for recompilation.

- **JSP (Java Server Pages):** This technology is used to create web application just like Servlet technology. It can be thought of as an extension to Servlet because it provides more functionality than servlet such as expression language, JSTL, etc.

- **JDBC (Java Database Connectivity):** JDBC API is a Java API that can access any kind of tabular data, especially data stored in a Relational Database. JDBC works with Java on a variety of platforms, such as Windows, Mac OS, and the various versions of UNIX.

4.0 References

1) https://www.javatpoint.com/

2) https://www.w3schools.com/

3) https://stackoverflow.com/