A

Synopsis

on

Family Blood Pressure Monitoring Management System

Minor Project II

For

fulfillment of

Computer Science & Engineering

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Project Guide

1. INTRODUCTION

1.1. Scope of the Project

The objective of this application is to develop a system that effectively manages the data related to the Blood Pressure monitoring. The purpose is to maintain a centralized database of all BP monitoring related information. The goal is to support various functions and processes necessary to manage the data efficiently.

1.2. Existing System

This existing system is not providing secure registration and profile management of all the users properly. This system is not providing on-line Help. This system doesn’t provide tracking of users activities and their progress. This manual system gives us very less security for saving data and some data may be lost due to mismanagement.

1.3. Proposed System

The development of this new system contains the followingactivities, which try to automate the entire process keeping in the view of database integration approach. This system maintains user’s personal, and contact details. This system will provide on line help and search capabilities. User friendliness is provided in the application with various controls provided by system rich user interface.

Authentication is provided for this application only registered users can access. Blood pressure monitoring information files can be stored in centralized database which can be maintained by the system. This system provides the users to manage the blood pressure monitoring data systematically. This system basically lessens the manual work and improves the quality of maintaining records and other information related to the blood pressure monitoring. One of the solutions that we are going to discuss here to speed up the database response by using MySQL database and to reduce the time complexity by using multi-user environment. Multi-user environment reduces burden with effortless maintenance.

2. SYSTEM ANALYSIS

2.1 FEASIBILITY STUDY

A feasibility study is a high-level capsule version of the entire System analysis and Design Process. The study begins by classifying the problem definition. Feasibility is to determine if it's worth doing. Once an acceptance problem definition has been generated, the analyst develops a logical model of the system. A search for alternatives is analyzed carefully. There are 3 parts in feasibility study.

2.1.1 Operational Feasibility

Question that going to be asked are Will the system be used if it developed and implemented.
If there was sufficient support for the project from the management and from the users.
Have the users been involved in planning and development of the Project.

2.1.2 Technical feasibility

Does the necessary technology exist to do what is been suggested Does the proposed equipment have the technical capacity for using the new system? Are there technical guarantees of accuracy, reliability and data security? The project is developed on Pentium III with 128 MB RAM. The environment required in the development of system is any windows platform.

The observer pattern along with factory pattern will update the results eventually.

The language used in the development is PHP, Apache Server and database as MySQL.

2.1.2 Economical Feasibility

To decide whether a project is economically feasible, to consider various factors as cost benefit analysis, long-term returns and maintenance costs.

NUMBER OF MODULES

The system after careful analysis has been identified to be presented with the following modules:

Blood Pressure Monitoring Management System Module:

In BPMMS project we use PHP and MySQL database. It has one modules i.e. user module.

User Module

User Registration: In this section, the user can register himself. A one-time registration is required for every user.

User login: In this section, users can log in with a valid email id and password.

Dashboard: In this section, the User can view the total listed family members and total BP records count.

Family Members: In this section, the user can add, edit and delete the family members.
BP: In this section, the user can add, edit and delete the family member BP details.

Reports: In this section, the User can generate the b/w dated report of a particular family member.

User can also update their profile, change their password and recover their password.

2.4 HARDWARE REQUIREMENTS:

Processor	:	Intel P-IV based system
Processor Speed	:	2.0. GHz
RAM	:	1GB
Hard Disk	:	40GB to 80GB

2.5 SOFTWARE REQUIREMENTS:

Database	:	MySQL
Server	:	Apache
Frontend	:	HTML
Scripting language	:	Java Script
IDE	:	Sublime

Technology : PHP

3. SYSTEM DESIGN

3.1 Class Diagram:

The class diagram shows a set of classes, interfaces, collaborations and their relationships.

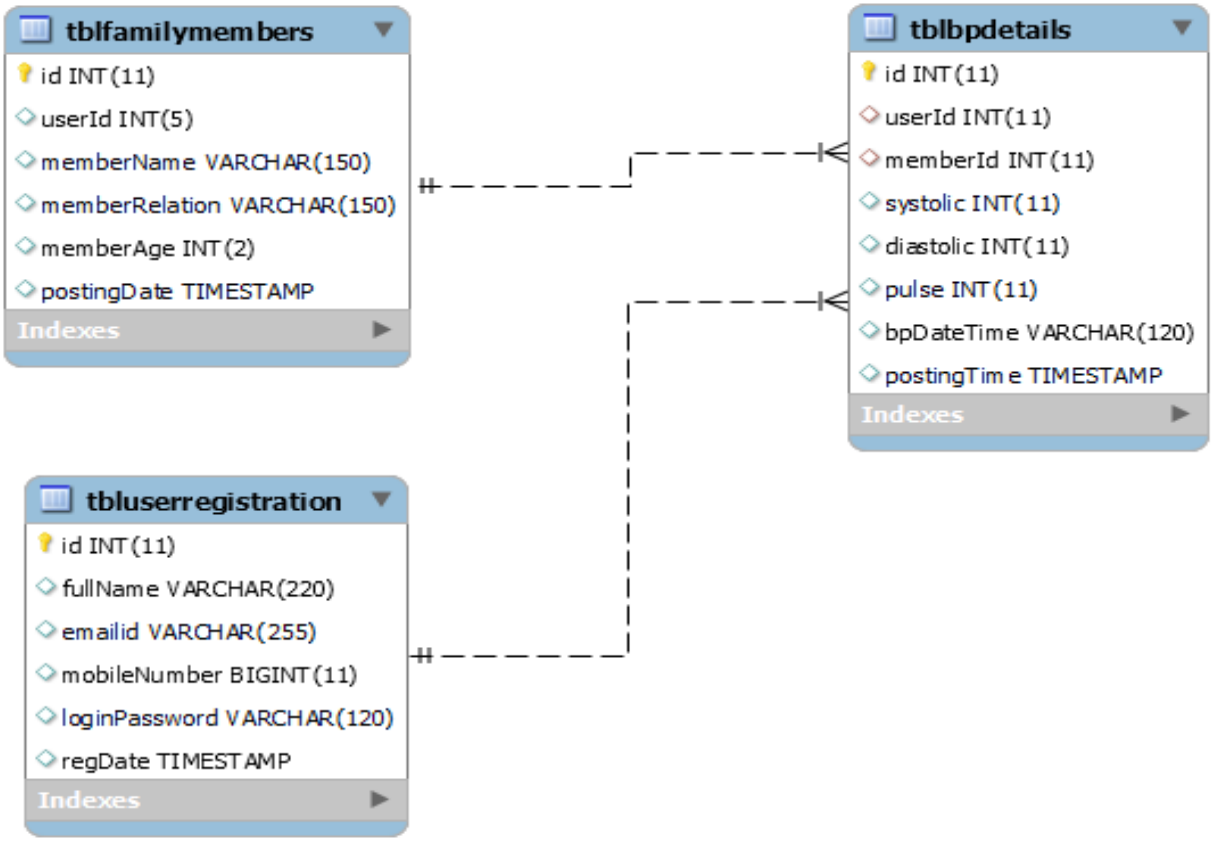
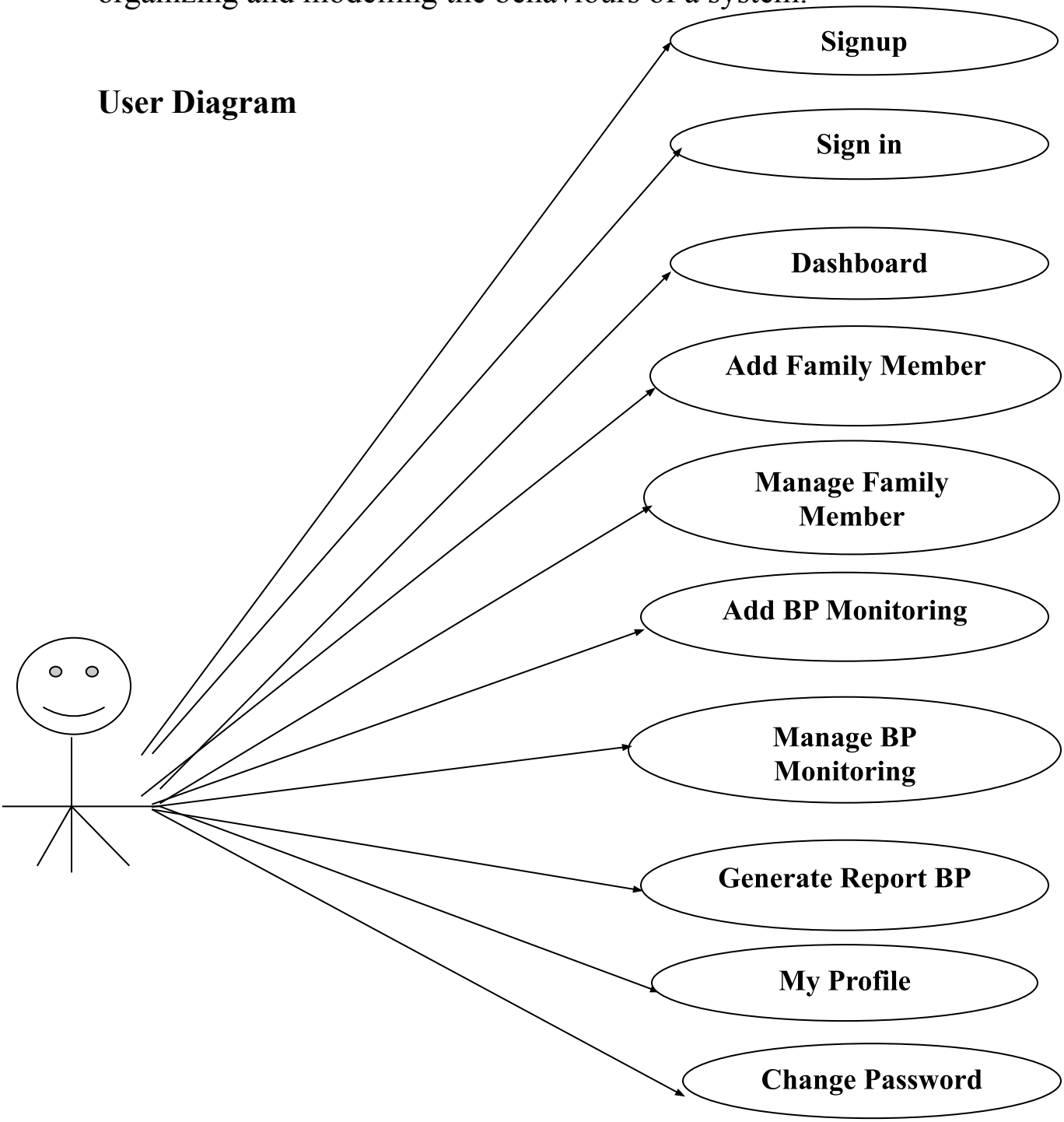


Fig: 3.1.1.1 Class diagram for on Blood Pressure monitoring management

3.1.1 Use case diagrams:

Use case diagram consists of actors, use cases and their relationships. These diagrams are especially important in organizing and modelling the behaviours of a system.

User Diagram



3.2 ER-DIAGRAM

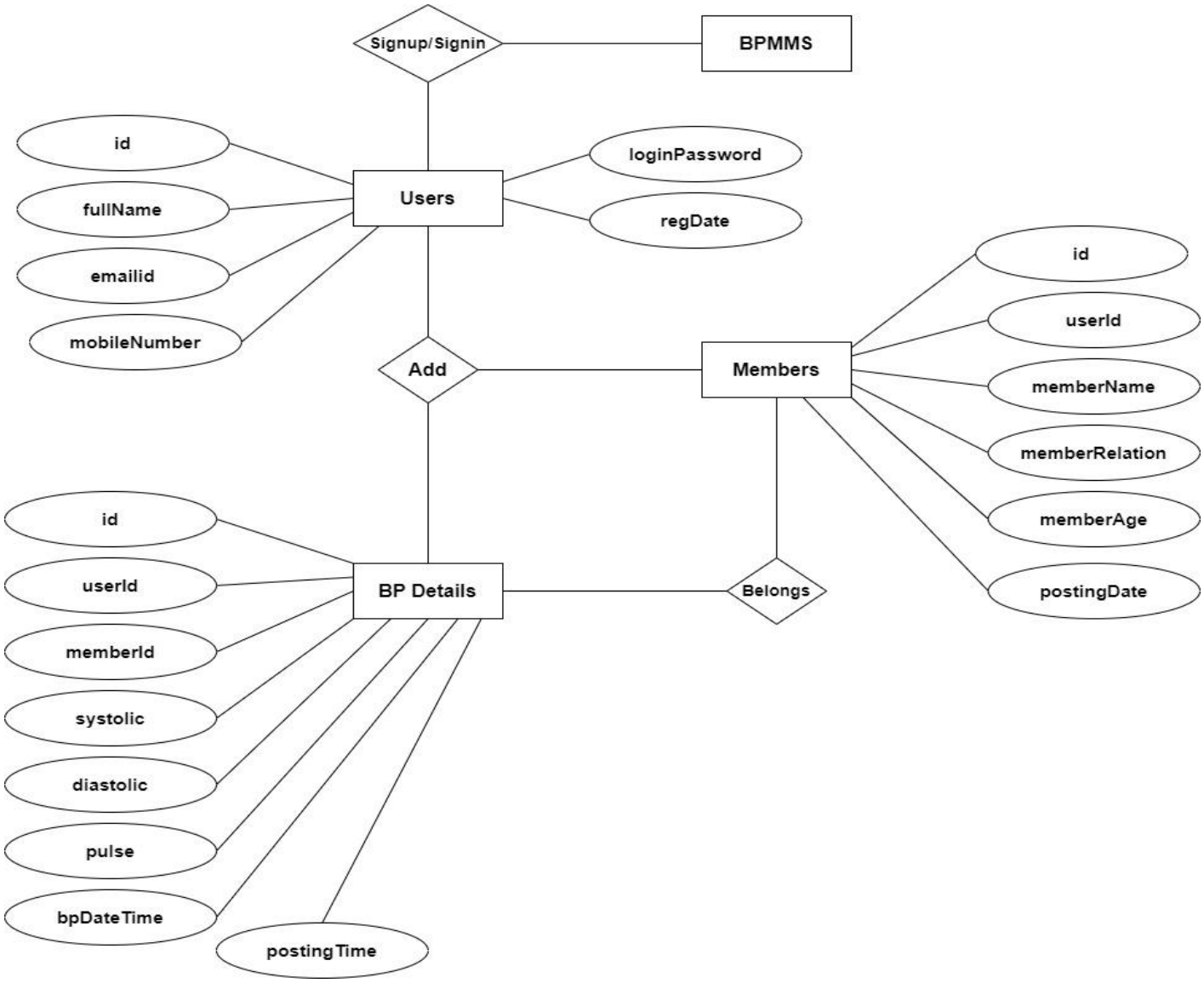
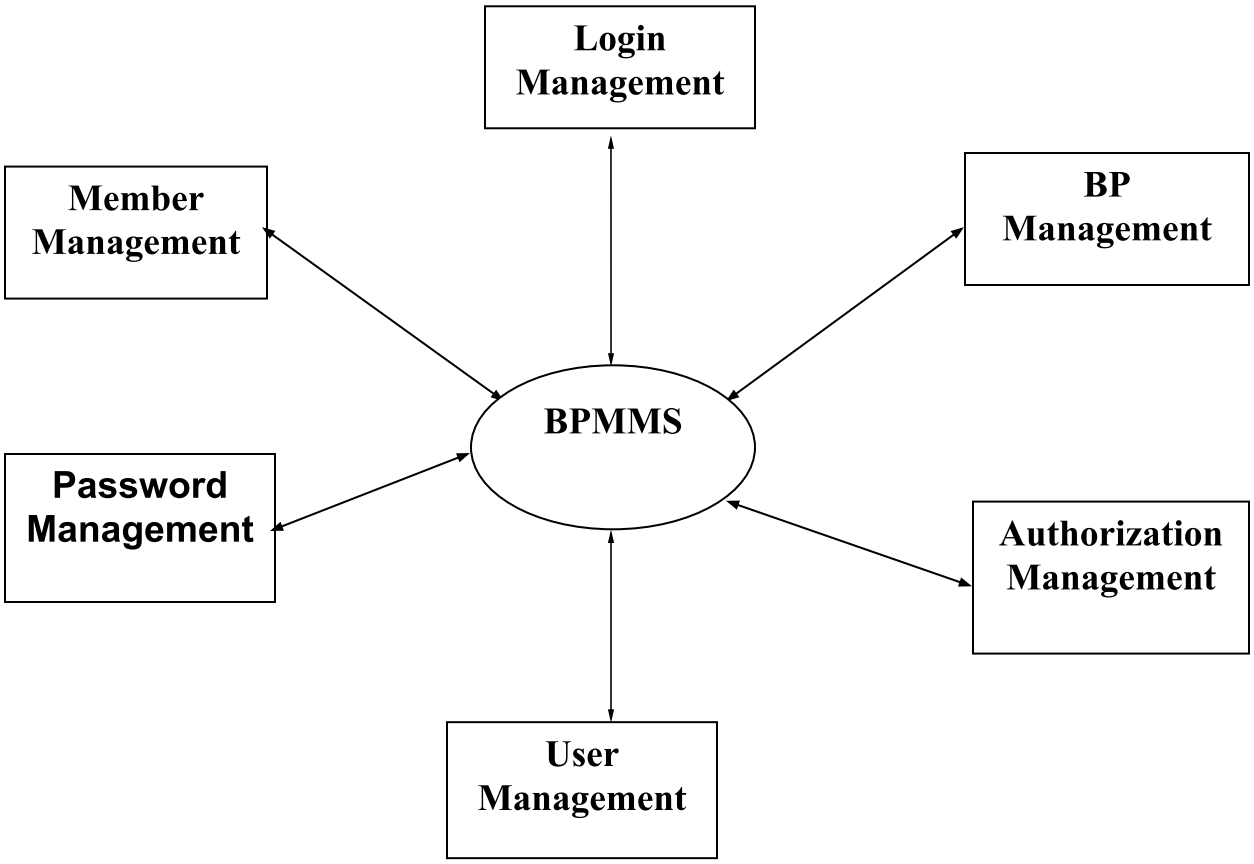


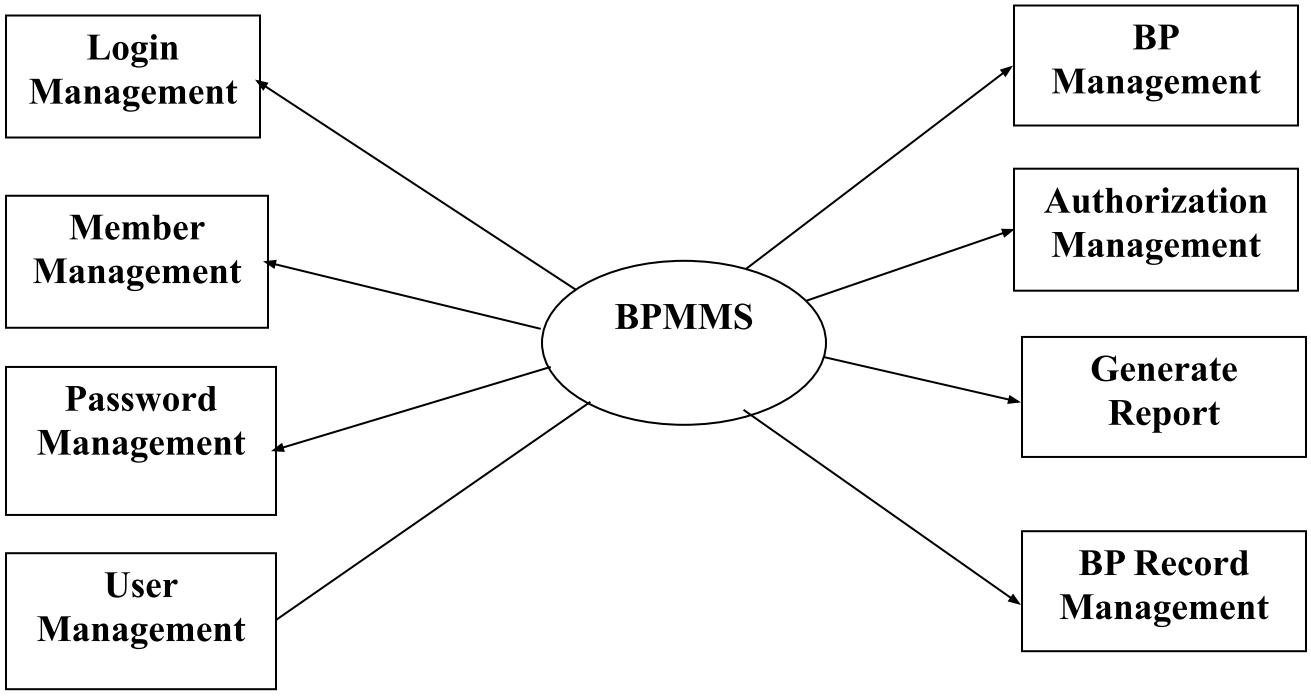
Fig: 3.1.3 ER diagram for Blood Pressure Monitoring System

3.2 DATA FLOW DIAGRAM

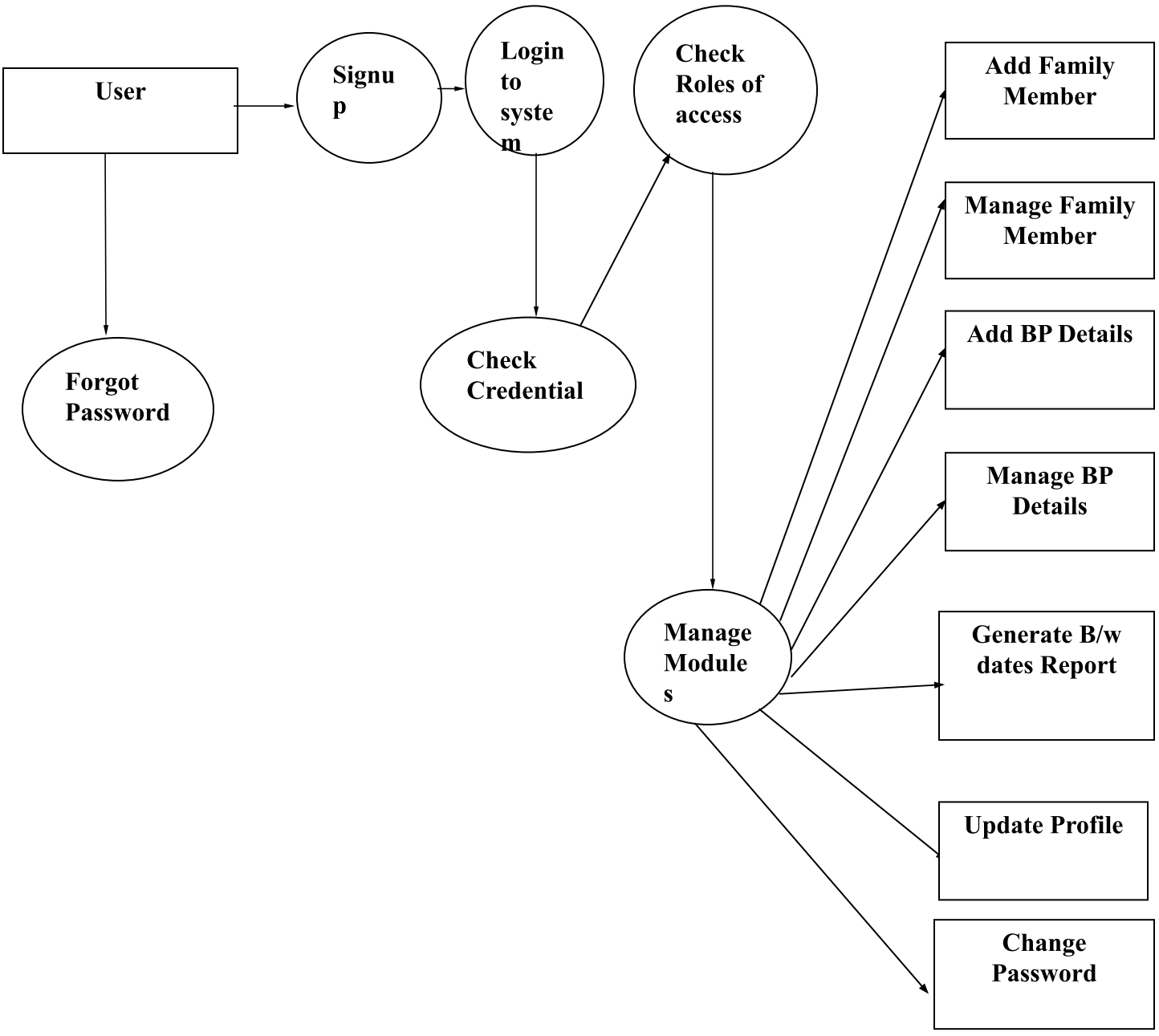
Zero Level DFD



First Level DFD



Second Level DFD



4.1 TECHNOLOGIES USED

Programming Language

PHP

- ✔ PHP stands for PHP: Hypertext Preprocessor
- ✔ PHP is a server-side scripting language, like ASP
- ✔ PHP scripts are executed on the server
- ✔ PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.)

MYSQL

- ✔ MYSQL is a database server
- ✔ MYSQL is ideal for both small and large applications
- ✔ MYSQL supports standard SQL

✔ MYSQL compiles on a number of

platforms

✔ MYSQL is free to download and use

CSS

✔ Cascading Style Sheets (CSS)

✔ Simple mechanism

✔ Easy for adding style (e.g., fonts, colors, spacing) to Web documents.

7. CONCLUSION

The **“Blood Pressure Monitoring Management System”** was successfully designed and is tested for accuracy and quality. During this project we have accomplished all the objectives and this project meets the needs of the organization. One of the solutions that we are going to discuss here to speed up the database response by using MySQL Server database and to reduce the time complexity by using multi-user environment. Multi-user environment reduces burden with effortless maintenance.

GOALS ACHIVIED

- Reduced entry work.
- Easy retrieval of information.
- Reduced errors due to human intervention.
- User friendly screens to enter the data.
- Portable and flexible for further enhancement.
- Web enabled.
- Fast finding of information request.