



Department of BE-Software Engineering  
**NEPAL COLLEGE OF  
INFORMATION TECHNOLOGY**

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Balkumari, Lalitpur, Nepal.

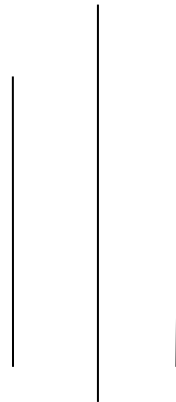
A First Project Report on

## **Hospital Management System**

Submitted in Partial Fulfilment of the Requirements

For the Degree of **BE-Software Engineering**

Under ***Pokhara University***



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## **Abstract**

This project describes a case study, where we focus on managing the Hospital Management System in modern way and to make it more advanced using a process based upon different programming language (php, MySQL, Bootstrap, JavaScript). The project will cover implementation of modern way of management. This project targets all the doctor and patients providing them the easiest way of treatment with spending less amount of time for getting the appointment of doctor and to get the advanced facilities.

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# 1. INTRODUCTION

Our project is on the topic of Hospital Management System. It can be used to make a systematic way of managing the system. So, to run it properly and systematic ways, by utilizing our skills in different programming language. We would like to prepare website by which we can make more systematic in management system. It would also help to manage a proper security which overcomes the many difficulty. Through, our project we would like to grab the attention of different management system and setup our new concept of hospital management.

The basic languages are used are as following:

Php

JavaScript

Bootstrap

MySQL – jQuery

Html

CSS

The system is based on web-based system which helps both doctor and patients. Patients are wasting more time on searching appropriate doctor for treatment.

## 2. PROBLEM OF STATEMENT

As we can see around us that how we are being used to the traditional way of ticketing and also the system we are used of are not advanced.

This project targets customers to collect the tickets easily without staying in the line for long time. It can be the most efficient and modern way for collecting the ticket in any system. Similarly, it also provides the people the more managed system and they can be used to it.

- Delays in attending to patients.
- Inaccurate record keeping
- Information redundancy

### 3. PROJECT OBJECTIVES

The main objectives of hospital management system is to provide better facility for patient's treatment. Modest way of hospital management is aimed to aid patients to get proper treatment with considered doctor in an efficient way also focus on the management of any service providing organization.

- It helps to manage the process of taking appointment from doctors.
- It provides proper information of each doctor and patients and it also create record for a long time,
- It also manages better security system,
- We can analyze the record if there is any crime issue.
- Its helps to reduce the time for searching appropriate doctor for specific treatment.

### BENEFITS OF SYSTEM

- Achieve good quality ratings
- Better revenue management
- Avoid error and track every single detail

- Improved clinical decision-making
- Improve data security
- Establish your hospital as technically advanced

## 4. PROJECT OVERVIEW:

The main aim of the project is to overcome the traditional way of managing the hospital management system and replacing it by the latest technology. The project is focused on the traditional and oldest method i.e. water fall method in which is:

1. linear sequential method in which one step is start after the complete of another,
2. Simple to understand and easy to implement

## Development Works

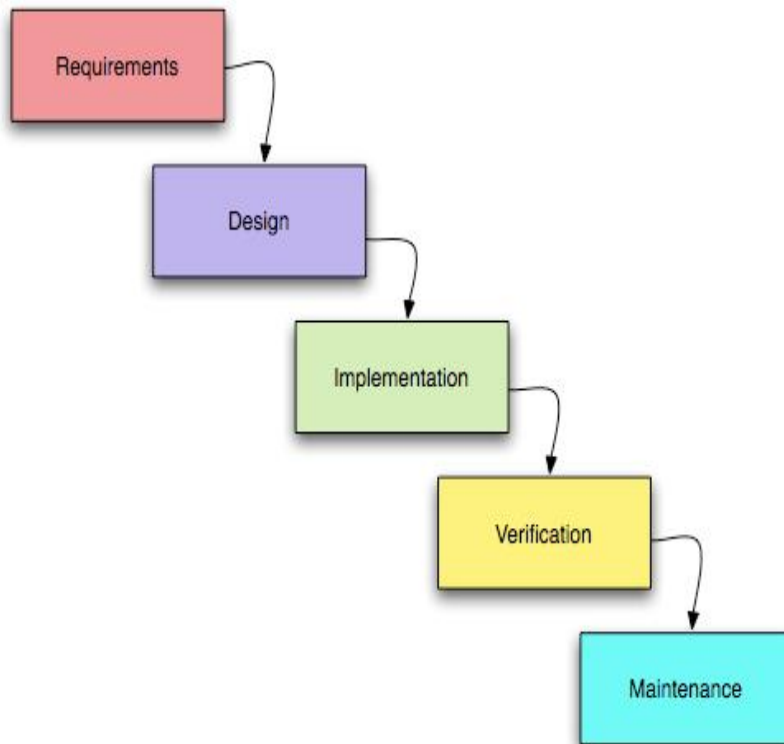


Figure 1. Waterfall Model

### Advantages:

- It is easy to manage and simple to understand.
- In this method one phase don't overlap other.
- It is one of the best methods for small projects.

### Disadvantages:

- It is difficult to go back and change something.
- There is no working software until late stages of SDLC
- There is also more risk and uncertainty
- This method is not applicable or sweet able for complex and object-oriented projects.



## Project plan

For the project the necessity of plan is required, here is my plan for the project in different topic below:

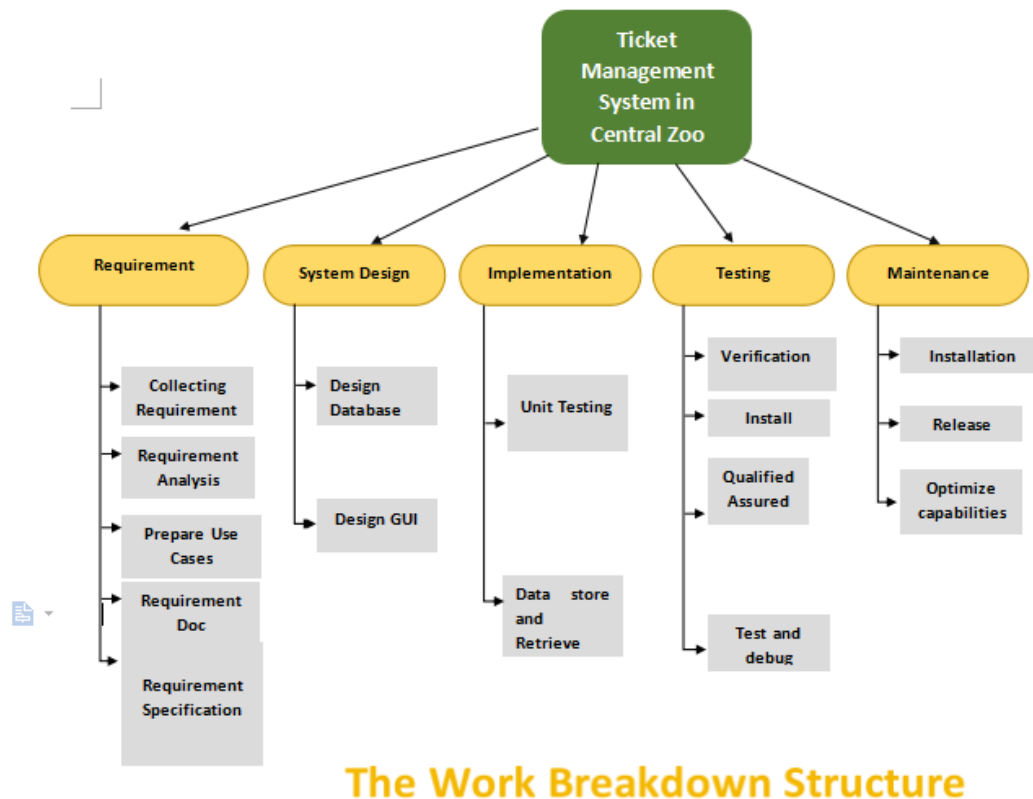
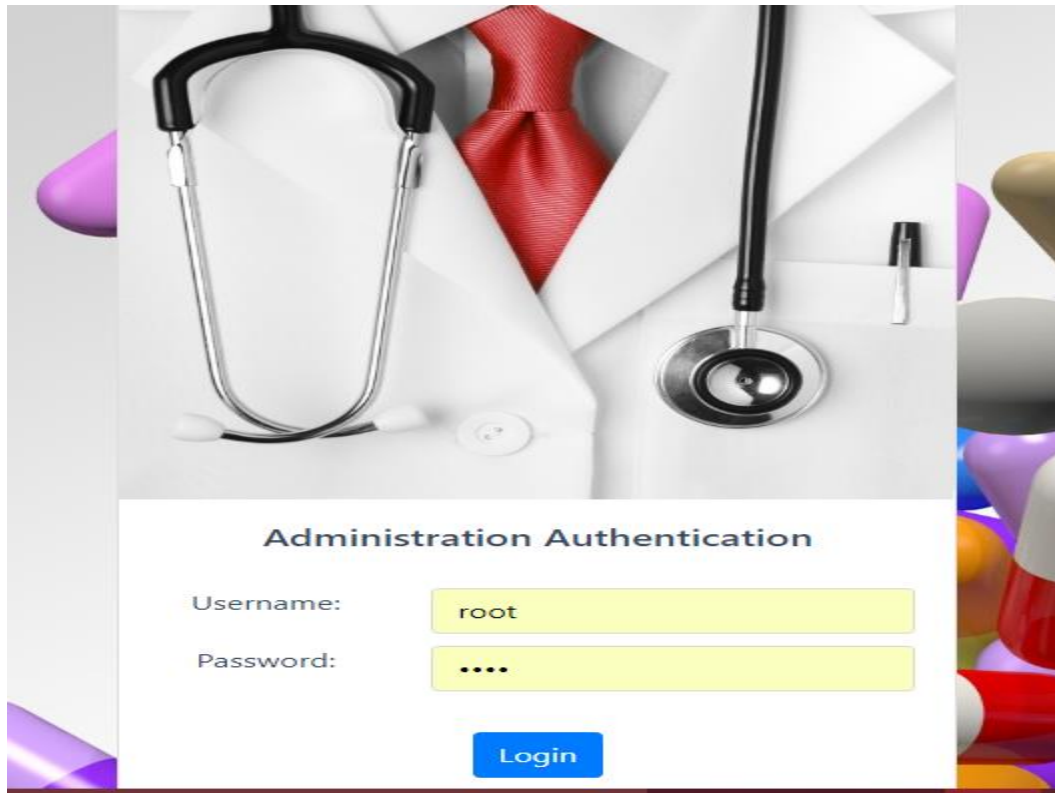


Figure 2. Work Breakdown Structure (WBS)

## 1.GUI Design

The full forms of GUI is Graphical User Interface. Some of the sample which I am going to design in my project are shown below that gives some idea about how my project actually looks. The same images may not be in my final project but it clarifies about my project and its works.

The image shows a login form titled "Administration Authentication" overlaid on a background image of a doctor's white coat with a red tie and a stethoscope. The form has two input fields: "Username:" with the text "root" and "Password:" with four dots. Below these fields is a blue "Login" button.

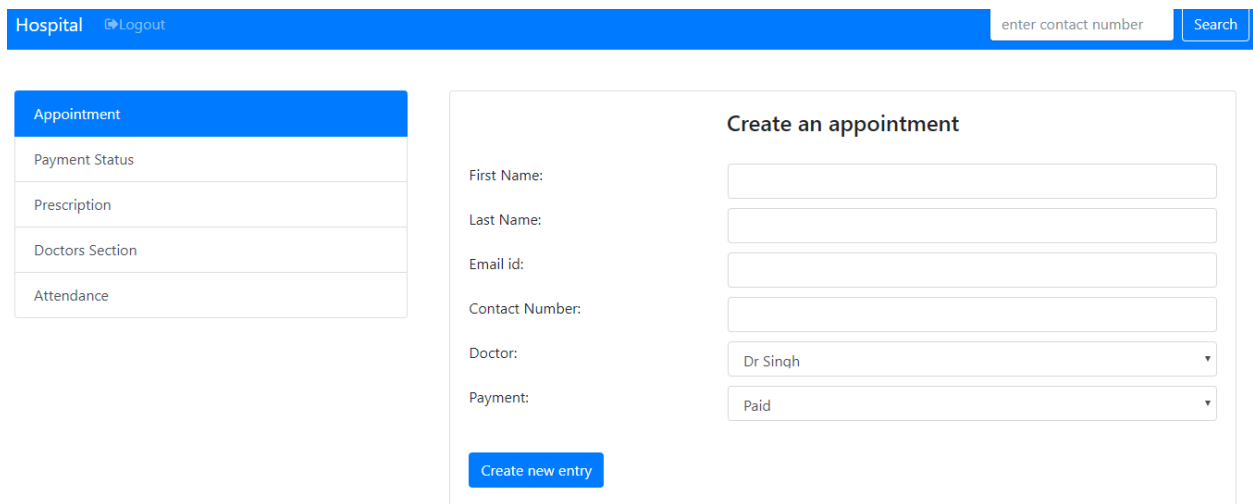
**Administration Authentication**

Username:

Password:

[Login](#)

Figure 3. Login Form

The image shows a web interface for creating an appointment. At the top is a blue header with "Hospital" and a "Logout" link. On the right of the header is a search bar with the placeholder "enter contact number" and a "Search" button. On the left is a sidebar menu with "Appointment" highlighted in blue, and other options: "Payment Status", "Prescription", "Doctors Section", and "Attendance". The main content area is titled "Create an appointment" and contains several input fields: "First Name:", "Last Name:", "Email id:", "Contact Number:", "Doctor:" (a dropdown menu showing "Dr Singh"), and "Payment:" (a dropdown menu showing "Paid"). At the bottom of the form is a blue "Create new entry" button.

Hospital [Logout](#)  [Search](#)

**Appointment**

[Payment Status](#)

[Prescription](#)

[Doctors Section](#)

[Attendance](#)

**Create an appointment**

First Name:

Last Name:

Email id:

Contact Number:

Doctor:

Payment:

[Create new entry](#)

Figure 4. Creating Appointment

## 2.ER-diagram

ER diagram is defined as the figure which shows the relationship between two or more than two entities in a systematic and under stable ways. Entity is defined as the table representing data. With the help of foreign key, two entities are linked or which make the relationship between entities and every entity have its one Primary key which is uniquely identify. The ER for our database look as:

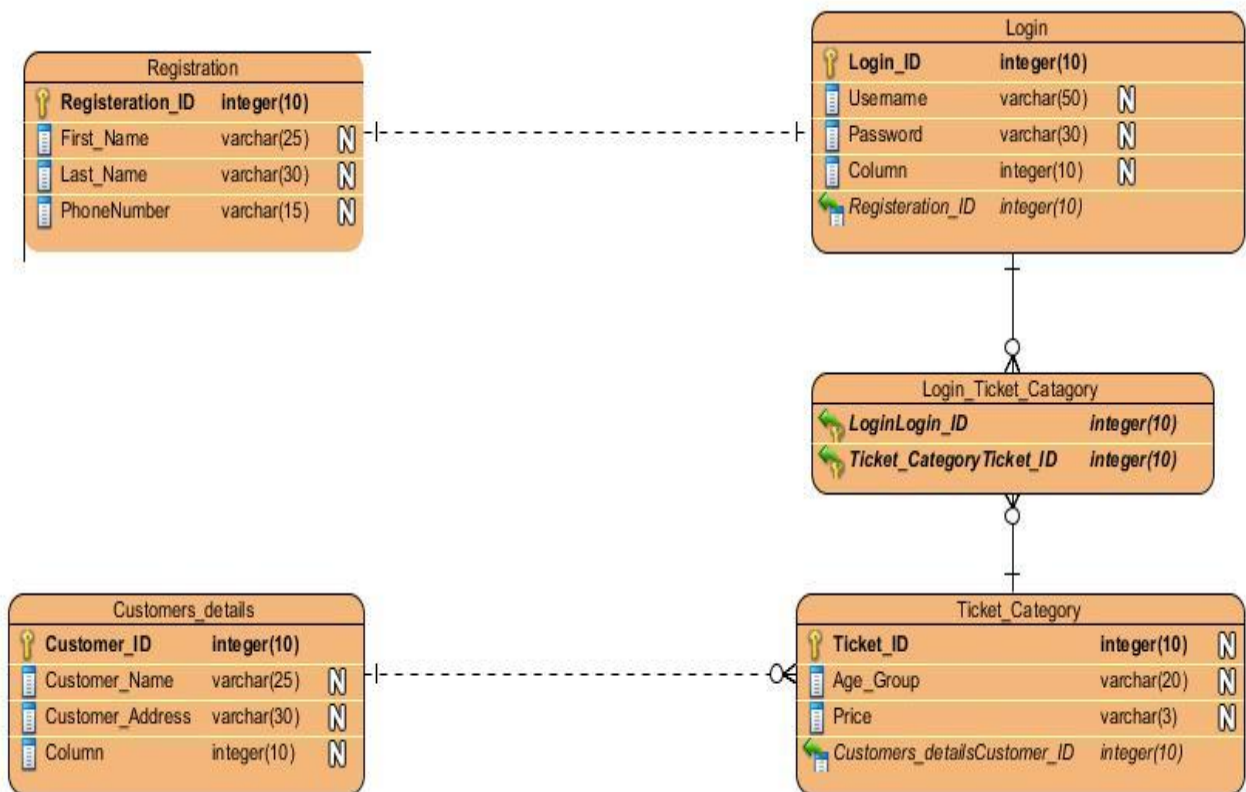


Figure 5. ER-Diagram

## 5. PROJECT SCOPE

- To manage the modern ticket system process,
- To distribute in computerized way,
- To provide a better security,
- To analysis in future by record,
- To investigate by record if there is any crime attempt,
- To provide ticket to the people according to their age group and better facilities.

## 6. SIGNIFICANCE OF STUDY

Our Project on the topic of hospital management system in any service-oriented Hospital is assured to provide a quality services and supports to all the customers who visited this place which required to increase efficiency and profitability with the solution that provides an unmatched rapid return-on-investment.

This proposal shares information by using an automated system which allow to purchase the ticket and appointment with the doctors and they will be relatively familiar with latest technology.

## 7. METHODOLOGY

### I) Project identification and selection

In this phase the project information system needs are identified and analyzed.

### II) Project initiation and planning

During this phase the project must be well planned and simplest and modern ways should be done to make it more efficient.

### III) Analysis

In the phase, the system should be studied well and must be analyzed before implementing the ideas.

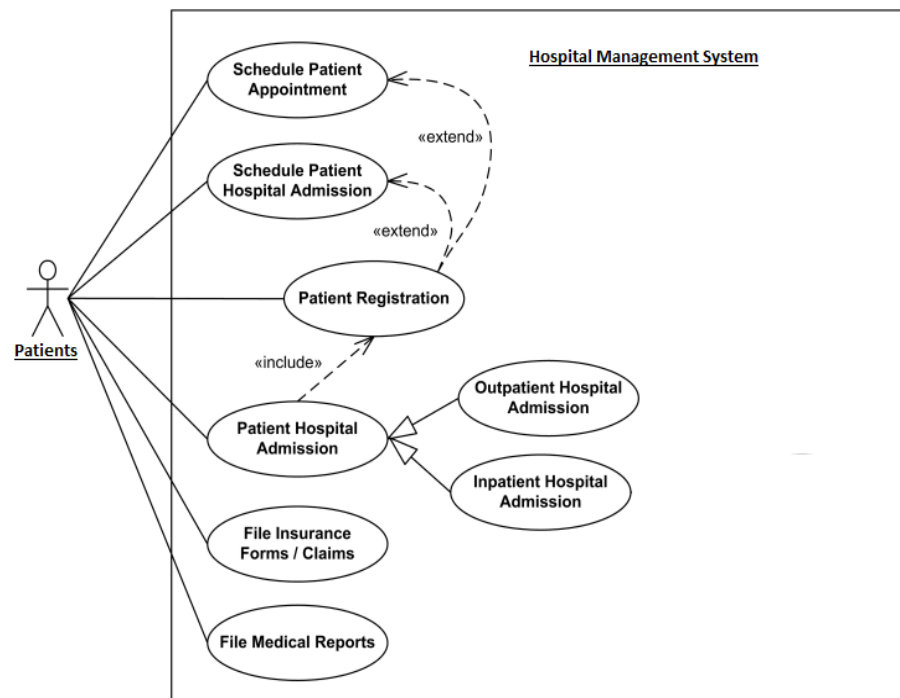
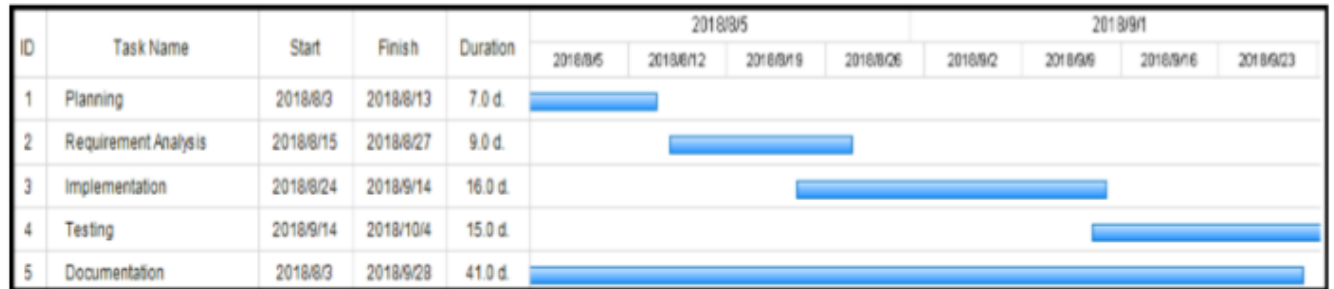


Figure 6. Use Case Diagram

## GANTT CHART

Following is the representation of the time we spent for the completion of the project. We all did respective tasks that were given to us for accomplishment of this iOS Application project.



## 8. DELIVERABLES

By the completion of this project following things will delivered

- A proper management of any service-oriented Organization/Hospital which provides the information about the staffs, booking system and security basis
- A final report which includes all the methodologies used to prepare the project

## 9. TIME SCEDULE

	1 month	2 month	3 month	4 month	5 month	6 month
Analysis	✓					
Design		✓				
coding			✓	✓		
Implementation					✓	✓

## 10. BIBLIGRAPHY

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