

# Healthcare Website (NHF)



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## Submitted by:

Usama Shaheer	2019-CS-605
Nabeel ur Rehman	2019-CS-619
Muhammad Zohaib	2019-CS-632

## Supervised by:

Mam Anam Iftikhar

Department of Computer Science, New Campus  
**University of Engineering and Technology**  
**Lahore, Pakistan**

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# Chapter 1

## Proposal Synopsis

### 1.1 Abstract

The main goal of NHF is to design a platform that will improve patient care and will reduce the expense of going to doctor. It aids in the registration of complete patient data, records and retains a medical e-commerce store, treatment needs, audio and online consultation between doctors and patients, planned appointments, and more. It handles and secures patient information, doctor's information, interaction between doctors and patients and so on. This was done by hand and its' principal job is to register and maintain patient and doctor information and to access and update the information when needed.

### 1.2 Introduction

Health systems have a vital and continuing responsibility for people's health throughout the lifespan. They are crucial to the healthy development of individuals, families and societies everywhere. The real progress in health towards the United Nations Millennium Development Goals and other national health priorities depends vitally on stronger health systems based on primary health care. Improving health is clearly the main objective of each health system, but it is not the only one. The objective of good health itself is really twofold: the best attainable average level – goodness - and the smallest feasible differences among individuals and groups – fairness. Goodness means a health system responding well to what people expect of it, and fairness means it responds equally well to everyone, without any kind of discrimination.

According to the World Health Organization (WHO), each national health system should be directed to achieve three overall goals: good health, responsiveness to the expectations of the population, and fairness of financial contribution.

Progress towards them depends crucially on how well systems carry out four vital functions. These are: service provision, resource generation, financing and stewardship. Comparing the way these functions are actually carried out provide a basis for understanding performance variations over the time and among countries. There are minimum requirements which every health care system should meet equitably: access to quality services for acute and chronic health needs; effective health promotion and disease prevention services; and appropriate response to new threats as they emerge (emerging infectious diseases, ageing of the population and growing burden of non-communicable diseases and injuries, and the health effects of global environmental changes) Hospitals, clinic and community health agencies can be very different from other work environments. Healthcare systems are complex and there are many things you need to know about types of hospital systems, patient care, healthcare providers. In present scenario mobile is an essential part for human life. It provides better facilities for storage and retrieval of information related to different areas of application.

Medical store management system will be good software for the druggist that it not only reduce the complexity but also be efficient in working and maintaining the record hence finally it will be beneficial for stockiest of medical store. On the other hand if anybody is ill and wants to visit a doctor for checkup, he or she needs to visit the hospital and waits until the doctor is available. The patient also waits in a queue while getting appointment. If the doctor cancels the appointment for some emergency reasons then the patient is not able to know about the cancellation of the appointment unless or until he or she visits the hospital. As the mobile communication technology is developing rapidly, therefore, one can use the mobile's applications to overcome such problems and inconvenience for the patients.[3]

### 1.3 Problem Statement

If we look around, there are a lot of people who are not able to manage time due to their busy schedule and cannot check to the doctor. The other big problem is that if we had a doctor checkup, it would often happen that we would come home and missed some important point to be discussed with doctor, so this platform is being set up to solve it. In addition, if there is a minor problem, we can consult a doctor online. In this modern age, everything is being done at home. People want to get every facility at home. The same is true in the medical field. People need medicine and medical equipment at home. So it is very important to overcome this problem

## 1.4 Objectives

By the end of this study, the objectives expected to be achieved are:

- Provide a platform where the patient can easily reserve the appointment with doctor.
- Provide a platform where the patient can check the availability of a doctor in the hospital or in foundation.
- Provide a platform where the patient can do online consultation with doctors.
- Provide a platform from which the user can buy medicines and medical equipment.
- Provide a platform from where the user can know about the foundation.

## 1.5 Features/Scope

- Registration with two factor verification.
- Patient's Interface where the patient will register and make an appointment with the respective doctor for a checkup or consultancy.
- Doctor's Interface from where doctor will deal the patients
- The audio and video feature from where the patient can connect with the doctors.
- An online E-Commerce medical store from which the user buy the medicines and medical.
- An interface that will be for management staff from where the user can check the information about foundation and doctors.
- Organization Membership Registration Interface.

## 1.6 Related Work

- **Dawaii** A portal that fulfills day-to-day medical requirements of its customers. It delivers prescribed and OTC medicine, locates the doctor, hospital, blood banks blood donors, fixes appointment for consultation, provides

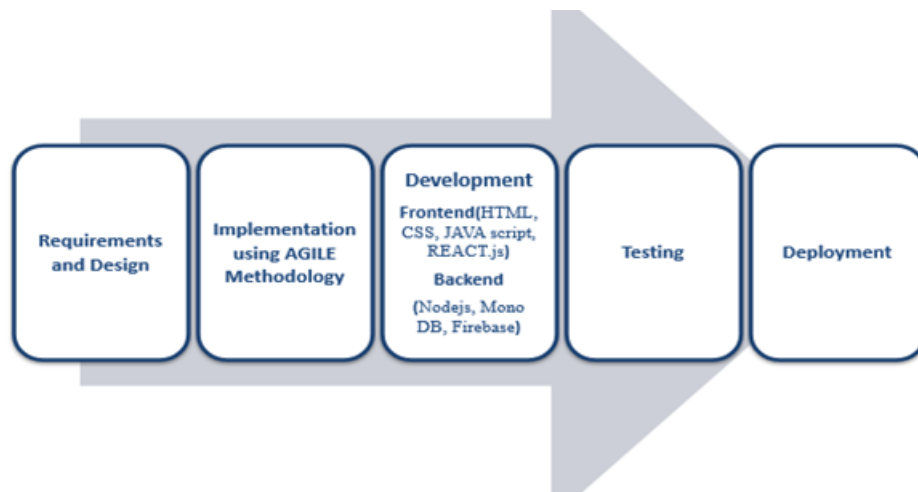
online consultation (second opinion), arranges for pathological and laboratory services and other healthcare management services.[1]

- **Medscape** The leading online global destination for physicians and healthcare professionals worldwide, offering the latest medical news and expert perspectives; essential point-of-care drug and disease information; and relevant professional education and CME.[2]
- **Epocrates** A mobile medical reference app, owned by Watertown, Massachusetts-based on health, that provides clinical reference information on drugs, diseases, medical treatment diagnostics and patient management.
- **Healthwire** An online platform that helps the user to find and book appointments online and video consultation with doctors.

TABLE 1.1: Related System Analysis

Related System	Weakness	Proposed Project Solution
Dawaai	deals with medicines	appointment with doctors
Medscape	Only for physicians	Online medical medicines
Epocrates	Provides clinical information	Feature of consultancy
Healthwire	Helps to book appointment	Should be online store

## 1.7 Proposed Methodology/System



The Agile method will be used for developing the whole project.

First of all, we will do requirement analysis through survey interviews and research and after that we do the planning phase on how to design and implement



the gathered requirements according to the consumer needs and we will divide whole project into iterations. After planning phase, we will develop each iteration completely and review each iteration according to the plan and after that we perform unit testing. With completing each iteration we will perform integration testing leading to complete development and acceptance testing

### **1.7.1 For User and Patients**

- User can order medication within minutes and get prescription medicines very quickly.
- Patients can see all available appointments.
- Patients can schedule appointments as per their convenience.

### **1.7.2 For Admin**

- Can monitor all the activities in system
- Ensures the integrity of the system
- validates the users of the system
- managing the database and showing all the statistics of the system.

## **1.8 Tools and Technologies**

- VS code
- Firebase
- MERN
- Chrome Browser and Firefox Browser
- Adobe XD
- MS Word
- MS Excel
- Latex
- Adobe Illustrator

TABLE 1.2: Work Division

Member Name	Tasks
M Zohaib	Backend Development
Usama Shaheer	Frontend Development
Nabeel ur Rehman	Design and Documentation

## 1.9 Work Division

Project is divided individually among team members as:

## 1.10 Data Gathering Approach

Following are our data gathering approaches:

- Surveying existing related applications.
- Society trends and observations.
- Questionnaires about features to be added.
- Reviewing proposed systems.

## 1.11 Timeline/Gantt chart

Monthly work division and tasks of team members are as following:

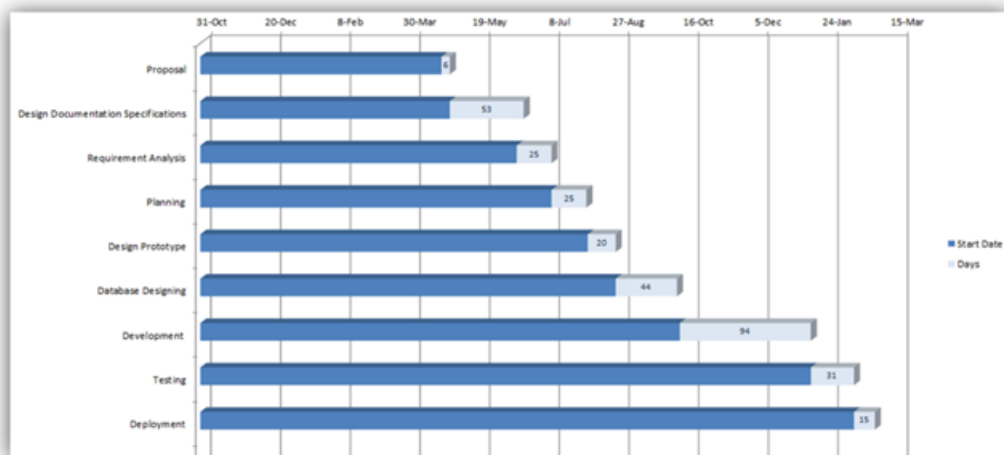


FIGURE 1.1: Gantt Chart

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