



**BUBT**

**Bangladesh University of Business and Technology**  
Department of Computer Science and Engineering (CSE)

**Niramoy – An Online Healthcare Application**

**PROJECT PROPOSAL**

COURSE CODE : **CSE 400**

COURSE TITLE : **SDP 4**

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## Introduction

**Niramoy - An Online Healthcare Application"** is a comprehensive mobile platform designed to revolutionize the way users access and manage healthcare services. Developed using Android Studio with Java and integrated with Firebase for backend support, Niramoy offers a seamless experience for users to register, log in, and utilize a range of essential health services. These include booking lab tests, ordering medicines, searching for specialist doctors and scheduling appointments, as well as accessing informative health articles. With a user-friendly interface and real-time data handling, Niramoy aims to make quality healthcare easily accessible, efficient, and convenient for everyone, anytime and anywhere.

## Objective

The main objective of **"Niramoy - An Online Healthcare Application"** is to provide a reliable, user-friendly, and efficient digital platform that enables users to access essential healthcare services from the comfort of their homes. This application aims to simplify health management by allowing users to book lab tests, order medicines, find and consult with specialist doctors, and stay informed through health-related articles. By integrating Firebase for real-time data storage and authentication, the app ensures secure access, smooth functionality, and a personalized healthcare experience tailored to each user's needs.

## **Key Features:**

### ***1. User Authentication***

- **Login / Registration** via Firebase Authentication
- Password reset and validation

### ***2. Lab Test***

- Display multiple test packages (e.g., Blood Test, Thyroid, Diabetes Package)
- View details and prices
- Add to cart and place an order

### ***3. Medicine***

- Browse or search medicines
- View medicine details, uses, and prices
- Add to cart and place an order

### ***4. Find Doctor***

- Filter/search based on specialization (e.g., Cardiologist, Dermatologist)
- View doctor profiles
- Book appointments with time slots

### ***5. Health Articles***

- Browse health-related articles
- Informative content related to diseases, tips, prevention, etc.
- Articles stored in Firebase database

### ***6. Order Details***

- View current and previous orders (lab tests, medicine)
- Order tracking status
- Show order history with timestamps

### ***7. Logout***

- Simple and secure logout from Firebase session

## Existing Systems in Bangladesh

In Bangladesh, several digital healthcare platforms have emerged in recent years, aiming to provide online medical services and bridge the gap between patients and healthcare providers. Some of the notable existing systems include:

1. **Praava Health**

Offers online doctor consultations, lab tests, and digital health records through their app and website. It focuses on personalized, high-quality healthcare services in urban areas.

2. **Jolpie**

A digital healthcare app offering doctor appointments, video consultations, prescriptions, and medicine delivery services.

3. **Doctorola**

A well-known platform that allows patients to find doctors by specialty, book appointments, and receive consultations both online and offline.

4. **Tonic by Grameenphone**

Offers 24/7 health advice over the phone, access to doctors, and discounts on diagnostic tests and hospital services.

5. **Maya App**

Provides anonymous health, mental well-being, and legal advice via chat with expert consultants, primarily focused on awareness and mental health support.

## Limitations of Existing Systems

- Many focus on either telemedicine or appointments—not a complete solution.
- Limited access to combined services like lab test bookings and medicine orders in one platform.
- Some platforms lack real

## **Problem Statement**

In Bangladesh, access to quality healthcare remains a significant challenge, especially for individuals in rural or semi-urban areas. Long waiting times at hospitals, difficulty in finding specialist doctors, lack of timely health information, and limited access to diagnostic and pharmacy services contribute to poor healthcare outcomes. While some digital platforms exist, they often offer only partial solutions and fail to integrate key services like lab test bookings, medicine ordering, and doctor consultations into one unified system. There is a clear need for a comprehensive, user-friendly, and accessible mobile application that bridges these gaps and empowers users to manage their healthcare needs efficiently and remotely.

## **Conclusion**

**"Niramoy – An Online Healthcare Application"** is designed to address the growing need for accessible, efficient, and integrated healthcare services in Bangladesh. By combining essential features such as user authentication, lab test booking, medicine ordering, doctor consultation, and health education into a single platform, Niramoy offers a complete digital health solution for users of all backgrounds. Built with Android Studio, Java, and Firebase, the app ensures real-time performance, data security, and ease of use. Niramoy has the potential to significantly reduce the burden on physical healthcare facilities and improve health outcomes by making quality healthcare services available at users' fingertips—anytime, anywhere.