**PROJECT PROPOSAL**

TITLE:

**MOBILE DOCTORS APPOINTMENT SYSTEM**

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## INTRODUCTION

The proposed project is a smart appointment booking system that provides patients or any user an easy way of booking a doctor’s appointment online. This is a mobile application that overcomes the issue of managing and booking appointments according to user’s choice or demands. The task sometimes becomes very tedious for the compounder or doctor himself in manually allotting appointments for the users as per their availability. Hence this project offers an effective solution where users can view various booking slots available and select the preferred date and time. The already booked space will be marked yellow and will not be available for anyone else for the specified time. This system also allows users to cancel their booking anytime. The application uses html, CSS, jQuery, java as a front-end and SQL database and PHP as the back-end (Projects, 2019).

The system also allows doctors to log in. Doctors can edit their profile and view their upcoming appointments, patients etc. They can even send prescriptions to their patients by selecting their patients from the dropdown list. The system also has an administrator section, where only a single person can manage the whole system. Administrator can add/remove patients, doctors and departments and search for appointments. The system features a very intuitive and responsive design that fits devices of all screen size (Smartphones, PCs, Tablets, and Notebooks etc.). The application automatically adapts its layout to match user’s screen size (Kaksslar, 2016).

## BACKGROUND OF STUDY

Fiden Medical Center is a medical hospital located at Community 2 Alang, Tema, Greater Accra Region. It has been in existence for the past five years and has been conducting business traditionally. There is no automation designed for this system, both management and patients are not satisfied with the existing system because the existing system can support only the patient information but cannot support the patient appointment or cannot support the doctor schedule. 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 cancelation of the appointment unless or until he or she visits the hospital. Our project tries to give solution by developing a mobile application for both the doctors and the patients at Fiden Medical Center to support patient’s appointment.

PROBLEM STATEMENT

The current health care providers are using different ways and systems for managing information. Some health care providers are using only one system for managing the health information but it is not comprehensive for managing all the information, for instance the system can support only the patient information but cannot support the patient appointment or cannot support the doctor schedule. 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 cancelation 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 internet to overcome such problems and inconvenience for the patients.

## AIMS AND OBJECTIVES

### AIMS

* To build a mobile online Doctor Appointment management system for Fiden Medical Center to provide patients full access to manage their hospital appointments

### OBJECTIVES

* Identify and analyze the current system used for managing patient information and health care information.
* Design and Develop an integrated system for managing the patient information and the health care information.
* Develop the confirmation appointment system to allow patient to confirm their appointment by themselves online using the mobile application installed on their mobile phones.

SIGNIFICANT OF THE STUDY

This project seeks to contribute to the literature of Doctors Appointment Systems in Ghana relating to how Web-based Appointment Systems can help in promoting development in villages, towns, organizations and societies.

**To Customers**

Patients can book appointment to see a doctor at the comfort of their home hence increase productivity.

**To the Organizations**

This study world spur up a greater desire for an improvement in business strategies and services rendered in a bid to further enhance the organizations performance. The profit will increase since most patients will like to book an appointment online and know when to come see a doctor than to come waste time in the hospital to book an appointment.

**To The Government**

Once Hospitals experience competitive advantage, profit is increase and tax will be paid to the state which can be used to undertake developmental project for the progress of the nation

## SYSTEM SPECIFICATION

This section describes the hardware components and software requirements needed for effective and efficient running of the system.

The software requirement specification and hardware specification forms the basis of software development.

## SOFTWARE REQUIREMENTS

1. Operating system: Windows (98, 2000, ME, NT, XP, Vista, 7, 8, 10), Linux, Mac OS, Android OS for mobile devices
2. Android Studio

## HARDWARE REQUIREMENTS

1. A physical memory (RAM) of 512MB and above are required.
2. Intel, Celeron or AMD Pentium Three processor.
3. Hard disk capacity: Not less than 5 GB.

## SYSTEM DESIGN

SERVER SIDE APPLICATION

INTERNET

MOBILE APP

FIREBASE SERVER

Doctors Client-side

Patient’s client-side

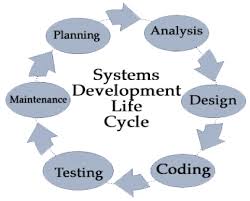
METHODOLOGY

The methodology that will be used to develop this system is the System Development Life Cycle. The systems development life cycle (SDLC), also referred to as the application development life-cycle, is a process for planning, creating, testing, and deploying an information system.

The systems development lifecycle concept applies to a range of hardware and software configurations, as a system can be composed of hardware only, software only, or a combination of both. There are usually six stages in this cycle: analysis, design, development and testing, implementation, documentation, and evaluation.

I choose this method because the system development life cycle helps alleviate the complexity of developing a system information system from scratch, within a framework of structured phases that help shape the project and manage it easily.

**System Development Life Cycle**



TECHNOLOGIES

There are several technologies that can be used in building this system. But in my case, I will use JAVA

Java is a general-purpose programming language; its main "function" is to create computer software. Java is general purpose because, in theory, you can use it to write a program that does anything within a computer's inherent capacity

DOCUMENTATION

I will be providing all the necessary documents on the project including the user manual, commented source codes, and so on.

QUALITY CONTROL AND TESTING

Quality is defined as conformance to requirements. At the project level, quality management involves the application of specific quality processes, checking that these planned processes have been followed, and ensuring that the project outputs are conformant with the standards that are applicable to that project (John D. Cooper, 2016). In order to achieve this quality i will be implementing the following tests; component testing, integration testing, functional testing, performance testing and usability testing.

PROJECT BREAKDOWN WITH WORKING DAYS ESTIMATED

|  |  |  |
| --- | --- | --- |
| **#** | **Stages/Tasks** | **Days** |
| **Stage 1** | **Analysis and Design** |  |
| 1.1 | Requirements analysis, Mock ups creation | 14 |
| 1.2 | Work plan creation | 7 |
| **Stage 2** | **Implementation** |  |
| 2.1 | Web application designing and testing | 10 |
| 2.2 | Creation of Database | 14 |
| 2.3 | Creation of web application functionality such as, login form, and user management | 10 |
| 2.4 | picture upload/delete functionality | 7 |
| 2.5 | Additional pages of content | 14 |
| **Stage 3** | **Testing and other QA tasks** |  |
| 3.1 | Testing and bugs fixing | 30 |
| **Stage 4** | **Deployment** |  |
| **4.1** | Deployment and hosting | 14 |

**Total estimated days: 120**

BUDGET

This is the estimated cost of the proposed application:

|  |  |
| --- | --- |
| EXPENSES | AMOUNT GHC |
| Front End Design  Backend Coding  Security  Flash Drive  Airtime/Bund with  Transportation  Refreshment  Consultation  Testing | 300.00  200.00  300.00  600.00  100.00  500.00  300.00  200.00  500.00 |
| Total | **3,000.00** |

CONCLUSION

**In Conclusion, I hope my research work will be accepted**