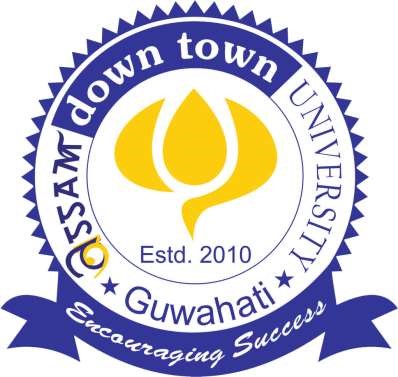
**SYNOPSIS**

**ON**

**Web Based Health Service System - AppointUs**

Submitted to

**ASSAM DOWN TOWN UNIVERSITY**



In partial fulfillment of the requirement of

**BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CLOUD TECHNOLOGY AND INFORMATION SECURITY**

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**INTRODUCTION**

AppointUs is a Web based health service system that allow users to book an appointment, call doctors, nurses or any medical experts from the convenience of their home, and it also allow online consultations with any medical experts. It is a smart appointment booking system that provides patients or any users an easy way of booking a doctor’s appointment online. This is a web based system that overcomes the issue of managing and booking appointment according to user’s choice or demands.

AppointUs provides more additional features like Homecare service that allows patients to call any medical experts like Doctors, Nurses, Medical Lab Technician, Veterinary Doctors, and Physiotherapist at their residence. This home care feature is simply an alternative for people who are not able to go to a hospital or clinics. Home care service is also useful for pets; that helps the pet owner to treat their pets at home without having any difficulties in taking their pets to a veterinary.

Another feature that AppointUs provides is Online Consultation with any Medical

Experts through any internet connected device. This feature helps clients to get 24x7 medical service online from any place at any time. Accessing medical advice from a doctor online eliminates the need to travel, which can also be very difficult for those who suffer from condition that reduce their mobility or those who live in rural areas where they have to travel to the closest town or city for medical attention. It also includes Telemedicine to provide clinical services to patients without an in-person visit. Telemedicine technology is frequently used for follow-up visits, management of chronic condition, medication management, specialist consultation and a host of other clinical services that can be provided via secure video and audio connections. It also provides Lab Tests Services by booking an appointment or by collecting samples from Home.

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**FEASIBILITY STUDY**

Due to the high popularity of Smartphone in the modern world, the website is expected to be accessible to all common users. The website will work on most devices due to its minimum specification requirements.

To access this website, users need only have internet access.

In addition, since the necessary hardware and software are widely available for a low price, it only requires an initial investment and does not need to be enhanced further. Thus, it is financially feasible.

This project is legally feasible as the data of the users are well protected at the backend from unauthorized access.

**Technical Feasibility:**

The technical feasibility of the web-based healthcare system will depend on several factors, including the availability of suitable technology platforms, the ability to integrate with existing healthcare systems, and the ability to ensure data security and privacy.

In this study, we will assess the technical feasibility of the web-based healthcare system by:

Conducting a thorough analysis of available technology platforms and determining which would be most suitable for the project.

Examining the system requirements and assessing the ability to integrate with existing healthcare systems, such as electronic health records (EHRs) and patient management systems.

Identifying potential security risks and developing strategies to mitigate them ensuring compliance with industry standards, such as HIPAA, for data security and privacy.

**Economical Feasibility:**

The economic feasibility of the web-based healthcare system will depend on several factors, including the cost of development, implementation, and ongoing maintenance, as well as the potential revenue streams.

In this study, we will assess the economic feasibility of the web-based healthcare system by:

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Conducting a cost-benefit analysis to determine the financial viability of the project.

Estimating the costs of development, implementation, and ongoing maintenance, including hardware, software, and staffing costs.

Identifying potential revenue streams, such as subscription fees or pay-per-use models.

Evaluating the potential return on investment (ROI) and developing a business plan.

**Operational Feasibility:**

The operational feasibility of the web-based healthcare system will depend on several factors, including the ability to provide reliable and effective healthcare services to patients and the ability to integrate with existing healthcare workflows.

In this study, we will assess the operational feasibility of the web-based healthcare system by:

Identifying potential operational challenges, such as staffing requirements and training needs.

Developing a plan for integrating the system with existing healthcare workflows.

Conducting user acceptance testing to ensure that the system meets the needs of patients and healthcare providers.

Identifying potential scalability issues and developing strategies to address them.

**Legal Feasibility:**

The legal feasibility of the web-based healthcare system will depend on several factors, including compliance with healthcare regulations and data privacy laws.

In this study, we will assess the legal feasibility of the web-based healthcare system by:

Ensuring compliance with healthcare regulations, such as HIPAA, and other data privacy laws.

Identifying potential legal risks, such as liability issues, and developing strategies to mitigate them.

Conducting a legal review of the project to ensure that all legal requirements are met.

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Overall, this feasibility study will provide a comprehensive assessment of the technical, economical, operational, and legal feasibility of the web-based healthcare system, enabling stakeholders to make informed decisions about the project.

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# **OBJECTIVE**

* We will manage all the details related to Doctor, Appointments, Patients, Bookings and we will handle all the information pertaining to Doctors and Tests. The project is totally built at the administrative end. The purpose of the project is to reduce manual work associated with managing the patient, appointment, and doctors. It also tracks all the details related to the patient, booking, and appointments.
* In Home Visit service, the primary objective is to ensure that healthcare services can be provided at home in a comfortable and safe environment.
* As a result of the COVID-19 pandemic, online medical services are on the rise across the globe. There can be anxiety associated with knowing we have a health issue that requires medical attention and treatment. In other words, instead of going to the doctor and describing your symptoms in order to receive treatment, with AppointUs we can now see a doctor online for any kind of periodic consultations.
* With Lab Test feature, patients can get the test reports simply by staying at home.

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**PROBLEM STATEMENT**

The world is becoming increasingly hectic everyday and people are very busy in their professional lives, and most people don't think about their medical fitness, they only visit the doctor in crisis situations and never for routine checkups because visiting a doctor take lots of time The first toughest part is to locate a doctor who specializes in some specific area like stoma, general physician, etc. Once you find a doctor, the second hardest part is to reserve an appointment by finding his number and contacting him, so we developed a solution, AppointUs, where you can book an appointment with a doctor while at home and choose a doctor of the desired category.

We also provide online patient consultation options so patients can get advice from a doctor without physically visiting the clinic. Additionally our website give a option of home visit service where client can call a doctors, nurses, medical lab experts or a veterinary doctor at their residence for health and comfort treatment.

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**METHODOLOGY**

To accomplish the objective of the project during development, first we must design the web pages from which users can navigate to the services we provide. We would need to make different forms where the user fills in his/her details and submits them so the medical experts can see it and take action on it. If, for example, a user wants to book an appointment with a doctor, speak with a doctor, or call a doctor, we would have to make different forms for all of our services.

As for making the web pages, we need to use HTML, CSS, & JavaScript on the Frontend, but on the Backend, PHP and MySQL are needed to make sure all the information and details of the users can be received safely and securely.

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**Flowchart Of The System**

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**EXPECTED OUTCOME**

The project will conclude with the launch of a fully fledged website with services like booking an appointment with any medical expert, a consultation online with any medical expert, as well as home visit provided by any medical expert. Users just need to visit our website, choose the service that they need, pick an expert and fill out their details.

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**FACILITIES REQUIRED FOR PROPOSED WORK**

Software required for the development of the project:

|  |  |
| --- | --- |
| Name of Components | Specification |
| Operating System | Windows, Linux, Mac OS |
| Language | HTML, CSS, JavaScript, PHP |
| Database | MySQL |
| Text editor or IDE | Notepad, Sublime, Notepad++. etc |
| Browser | Google Chrome, Microsoft Edge, Mozilla Firefox. etc |

Hardware required for the development of the project:

|  |  |
| --- | --- |
| Name of Components | Specification |
| Processor | Minimum 2 cores CPU |
| RAM | Minimum 1GB of RAM |
| Storage | Minimum 32GB |
| Monitor | Any |
| Keyboard | 122 Keys |

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