**Diagnostic Lab Website using python CGI**

**A PROJECT REPORT**

***Submitted by***

**SAYAK CHATTERJEE ( 430118010055 )**

**SOURIN KUMAR PAUL (430118010025)**

**Of**

**NARULA INSTITUTE OF TECHNOLOGY**

***at***

**ARDENT Computech Pvt. Ltd.**



**BONAFIDE CERTIFICATE**

Certified that this project report on **‘Diagnostic Lab Website’** in python is the bonafide work of **Sayak Chatterjee** and **Sourin Kumar Paul** who carried out the project work under my supervision.

**Signature of H.O.D. Signature of Mentor**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Prof. Jayanta Paul Prof. Meghali Das**

**Narula Institute of Technology, Ardent Computech Pvt. Ltd.**

**Agarpara, Kolkata Salt Lake, Kolkata**

**ACKNOWLEDGEMENT**

The project ***“Diagnostic Lab Website using python CGI”*** would not have been possible without the constant guidance of our guide  **Prof. Meghali Das**, Ardent Computech Pvt. Ltd. ,who guided us throughout this process despite her busy schedule. We are immensely thankful to her for her valuable ideas on improvement of the project.

We are also grateful to **Prof**. **Jayanta Paul**, our HOD, for all the help he provided. The brainstorming sessions that we had during the project development process, led to serious arguments and disagreements, but only for the betterment of the project.

**SAYAK CHATTERJEE ( 430118010055 )**

**SOURIN KUMAR PAUL (430118010025)**

BTECH,

Narula Institute of Technology,

4th semester, 2nd year.

**CONTENTS**

**SL. TOPICS PAGE No.**

1. Introduction5
2. Scope of the project 5
3. Implementation 5
4. Basic concepts and tools 6-7

**Introduction**

Diagnostic Labs are a need of modern day as many people require to conduct periodic test, more and more people are opting for regular checkups to asses their health situation. People are visiting these centers more often and having a website would be a great opportunity for increasing their business. Through the website a diagnostic lab can reach to a larger number people . A website will also be helpful for the customers.

This site will help the customers to book blood test online so they can avoid rush and standing in long queues for having an appointment. The reports can be published online so that customers can have a look at their report from the comfort of their home .

**Scope of the project**

This project can be further improved with more features in the near future.

**Implementation**

We have implemented our website in localhost using xampp server. A sample name of BloodFair is assigned for a better understanding of our model.

**BASIC CONCEPTS AND TOOLS**

### *Introduction to Python*

[Python](https://www.geeksforgeeks.org/python-programming-language/) is a widely used general-purpose, high level programming language. It was initially designed by Guido van Rossum in 1991 and developed by Python Software Foundation. It was mainly developed for emphasis on code readability, and its syntax allows programmers to express concepts in fewer lines of code.

Python is a programming language that lets you work quickly and integrate systems more efficiently.

There are two major Python versions- **Python 2 and Python 3**. Both are quite different.

Python interpreters are available for many [operating systems](https://en.wikipedia.org/wiki/Operating_system). [CPython](https://en.wikipedia.org/wiki/CPython" \o "CPython), the [reference implementation](https://en.wikipedia.org/wiki/Reference_implementation) of Python, is [open source](https://en.wikipedia.org/wiki/Open-source_software) software and has a community-based development model, as do nearly all of Python's other implementations. Python and CPython are managed by the non-profit [Python Software Foundation](https://en.wikipedia.org/wiki/Python_Software_Foundation).

***Characteristics of Python***

### Open Source

Like PHP, Rust, Swift and Perl, Python is an open-source software, meaning its source code is available within the license, and users are allowed to access, modify and/or distribute to the code to anyone without the developer’s permission.

### Portable

Because it’s an open-source software, Python has been ported to run on a variety of different platforms, some of which include Windows, Mac, Solaris, OS/2, BeOS, PlayStation, Sharp Zarus, Windows CE, PocketPC and more. But if you intend to run Python on a different platform, use caution to ensure that no system-dependent features are being used.

### Object-Oriented and Procedure-Oriented

Python supports both procedure-oriented and object-oriented functions. Procedure-oriented means the language is designed around procedures and functions that are reused throughout the language. In comparison, object-oriented means the language is built around objects that combine data and functionality.

### Embeddable

Python is embeddable with C or C++ programming, allowing users to enhance their code with scripting functions.

### Easy to Learn

Python is a beginner-friendly programming language that’s easy to learn, regardless of your experience/knowledge with the language. If you’re a newcomer who’s looking to learn his or her first language, give Python a try. Its simplistic syntax makes learning fun and easy, which is a rare trait among most programming languages.

### Libraries

One of Python’s greatest strengths is its libraries. The standard library contains tools to assist programmers in using the language, supporting many formats and protocols like MIME and HTTP. Also included in Python’s standard library is modules for creating graphical user interfaces, modules for manipulating regular expressions, and modules for unit testing. It’s important to note, however, that the standard library is not required to run or use Python in an application.