# **ProGuard: A Multilevel Health Checkup Paltform**

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**Abstract:** In the recent times the healthcare sector in India has been changing. The journey of someone sick and looking for treatment starts with finding a doctor in our nearby places or nearby home, and then may also involve finding labs to get tests done, a second option, finding a hospital to get a certain procedure done, and recover while taking good treatments and medications. For trying to solve the healthcare problem and claims to be the only one offering an end-to-end solution. The end-to-end problem with health care is not an end-to-end solution. Not even the government. PROGUARD aims to connect the marketplace with a strong community of healthcare providers. By using PROGUARD millions of patients can connect to over healthcare platform. Using this site the patients/customers easily find out the hospitals or doctors in nearby home or place and also provide the platform of the patient communicate the doctors in online and also book appointment without going on hospitals. It is platform to save your time and money. The patient easily finds out the doctors to help the solution of diseases. The people direct connected the doctors in our home using this website n internet. The shows the all doctors list and fees address phone number and most important is specialization on which fields. Like eye specialist, dentist etc.

Keywords: PHP, MySql, Wordpress, XAMPP.

#### I. Introduction

Preventing health today is the most important need on the hours for health conscious people. In these times of high stress lifestyle, more working hours and people taking irregular food habits begin to take their toll. The many diseases are occurring. In new city we are going we don't know about the hospitals and doctors and pathologies labs in our nearest place. So in that project provide the platform too easily and out the nearest place. You also book appointment online and also communicate online to doctors and patients.

The following departments our specialized doctors the list of diseases.

Allergist or Immunologist – In this conducts the diagnosis and treatment of allergic conditions.

Anesthesiologist - The treats chronic pain syndromes; administers anesthesia and monitors the patient during surgery.

Cardiologist - It treats heart disease

Dermatologist -- In this treats skin diseases, including some skin cancers

**Hematologist/Oncologist** - Treats diseases of the blood and blood-forming the issues (oncology including cancer and other tumors)

Internal Medicine Physician - treats diseases and disorders of internal body structures.

Nephrologists - Kidney diseases.

Neurologist – This department treat diseases and disorders of the nervous system.

Neurosurgeon - The doctor conducts surgery of the nervous system.

**Obstetrician** - The use women during pregnancy and childbirth. Treat the doctors

**Gynecologist** - Treats of the female reproductive system and genital tract.

Urologist -diagnoses the male and female urinary tract and the male reproductive system and treat.

Pathologist labs- Means Sonography for diagnoses diseases.

It helped with scheduling, calendaring, billing and managing the inventory for the doctors. Digital healthcare records could be saved on the cloud, assuring that consumers could reach out to their healthcare info anytime and anywhere.

We are providing the platform to easily search the hospitals in our in by place in our home/house. Also we are booking appointments online, talk doctors online without going on hospital. Help the doctor online the doctor asking the symptoms oh diseases the doctors about symptoms the doctors take medicine perception the patient download the prescription and take the medicine in medical store.

# **Benefits Of Health Checkup Or Various Tests**

- 1.CBC to detect infection.
- 2.Blood sugar to detect Diabetes.
- 3.Liver function test to detect if the liver is functioning at the optimum level.
- 4.Lipid profile for early detection related ailments.
- 5.PSA for detection for Prostatic cancer.
- 6. Chest x-ray to detect the abnormalities in lungs, airways and heart. ECG use to assess heart function.

7. Mammography for detection of cancer of the breast.

#### Objective

The main objective of this project to provide the platform of the patient to easily find out the doctors or hospital in our nearest place. Also provide the online book appointment process. Also the patient and doctor communicate online without going to hospital.

## **Problem Definition**

The problem is occur in the real time we don't know about the doctors or hospital also pathologist labs in our nearest place or which doctors are specialist in which deceases. It is a busy time executive looking to consult online because he doesn't have time to go to a doctor or a farmer in a rural village who wants to bring his wife to the city to get her good treated.

We don't know about the doctors are specialist in which fields like eye specialist child, dental heard specialist etc and not about the doctors fees and available the doctors which times and days.

# II. Background XAMPP

XAMPP is a free and open-source cross- platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages it is used to making the web site we can esily store or retrieve the data. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible. Using XAMPP's the advantages in this easily support any framework by developing the web sites.

# WordPress

WordPress is a free and open-sourceit is content management system (CMS) based on PHP and MySQL. Features of a plugin architecture and a template system. It is most associated with blogging, but it supports other types of web content including more traditional mailing lists and forums, media galleries, and online stores. WordPress is the most popular website management system in use it is the framework used for developing web sites. WordPress has also used for other application domains like such as pervasive display systems (PDS).

# MySQL

MySQL is an Oracle-backed open source it is the relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL all platforms run on virtually including Linux, UNIX and Windows.Using MySql we easily create the database and easily added the data without any changing the structure. In MySql we can easily retrieve the data. MySql sed many platform the MySql is a databases used for storing the data usinr rows and column.

#### PHP

PHP is a Hypertex Preprocessor is a general- purpose programming language originally it is designed for developing the web sites. It was created by Rasmus Lerdorf in the PHP reference implementation is now it is produced by the PHP Group. PHP originally stand for Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor. PHP code may be executed with a command line interface (CLI), embedded into Hyper Text Transport Protocol code, or it can be used in combination with various web template systems, web content management systems, and web frameworks.

# **III. Existing System**

- In existing system we don't know the hospitals and doctors in our nearby places.
- Can't online booking appointment
- Don't know about the specialist about the doctors for example dental, eye heard specialist etc.
- Don't know about the fees of doctors
- Pathology labs their fees of departments not aware about that.

## **IV. Proposed System**

- Provide the platform of easily finding the nearest hospitals/doctors with department of the doctor is specialized. With the doctor fees.
- The online book appointment of doctor
- The online communicate the doctor and patient and provide the prescription and also attach the pharmacy to provide medicine in given in prescription and deliver the home.
- Also provide the platform of scheduling, calendaring, billing and managing the inventory for doctors.

# V. Methodology

## TF-IDF: Termfrequency- Inversedocuments Frequency

In this information retrieval, tf-idf or TFIDF, this is the short for term frequency-inverse document frequency, is a numerical statistic that is intended to reflect how important a word is to a document in a collection or corpus. It is often used as a weighting factor in searches of the information retrieval, text mining, and user modeling. The tf-idf value increases proportionally to the number of times a word appears in the document and is offset by the number of documents in the corpus that contain the word, which is helps to adjust for the fact that some words appear more frequently in general.

Variations of the weighting scheme are often used by search engines as a central tool in scoring and ranking a document's relevance given a user query. tf-idf it can be successfully used for stop-words filtering in various subject fields, including text summarization and classification.

#### Standard algorithm for input validation

The coding for input validation always follows a standard pattern. The details will vary depending on the specification of the program, but the same pattern can always be used. This standard pattern saves programmer's time when designing programs. A pattern like also called a standard algorithm. Here is a simple version of a standard algorithm for input validation. It involves a conditional loop and an If statement, like this.

#### Algorithm for the model validation

Validation is often defined as the process of determining the degree to which a model is an required or accurate representation of the real world from the perspective of its intended uses. It propose to formulate the validation of a given model as an iterative construction process that mimics the often implicit process occurring in the minds of scientists. The offer a formal representation of the progressive build-up of trust in the model.

#### Form validation

If we go any popular site with a registration form, and you will notice that they give you feedback when you don't enter your data in the format they are expecting. You'll get messages such as: "This field is required"

"Please enter your phone number in the format xxx-xxxx" (it enforces three numbers followed by a dash, followed by four numbers)

"Please enter a valid e-mail address" (if your entry is not in the format of "somebody@example.com")

This is called form validation — when you enter data, the web application checks it to a is correct. If correct, then the application allows the data to be submitted to the server and (usually) saved in a database; if not, it gives you an error message explaining what corrections need to be made.

There are two different types of form validation Client-side validation- In this validation that occurs in the browser before the data has been submitted to the server. This is more user-friendly as than the server-side validation as it gives an instant response. This can be further subdivided:

**Server-side validation**- In this validation which occurs on the server after the data has been submitted. Server-side code is used to validate the data before it is saved into the database the data should be valid.

## Image Processing

This algorithms use to perform image processing on digital images. As a subcategory of digital signal processing, digital image processing has many advantages over analog image processing. It allows a much wider range of algorithms to be applied to the input data and can avoid problems such as the build-up of noise and signal distortion during the processing. Since the images are defined over two dimensions digital image processing may be modeled in the form of multidimensional systems

# **SMTP- Simple Mail Transfer Protocol**

Electronic-mail system is one of the most ubiquitous Internet-based applications today. It enables users to send and receive e-mail messages among each other within and from outside of the local area network. E-mail system is used every day and time in almost all organizations as a communication tool between managers, employees, customers, and partners for better information flow The e-mail system offers a fast, reliable and easy solution for such communication and reliable for use. SMTPis a transportation protocol used to transfer e-mail messages over the Internet. All e-mail servers use the SMTP to send e-mails from one e-mail server to another.

#### Multithreading

Multithreading is a process of executing multiple threads simultaneously or reliably. So these points we will ask ourselves what a thread is want. A thread is a lightweight sub process, a smallest it is the unit of processing. It is a many separate path of execution.





Fig. 4.1System Architecture

# VII. Conclusion & Further Work

## Conclusion

This project is more useful for the patient. It is easily find out thehospitals and doctors in nearby our places. Also choose the specialist doctors and their doctor's fees. This is a very useful web site.

#### **Further work**

In future work connect the online pharmacy the medicine deliver in our address and also take online payment.

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