

## CODEIGNITER FRAMEWORK

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### ABSTRACT

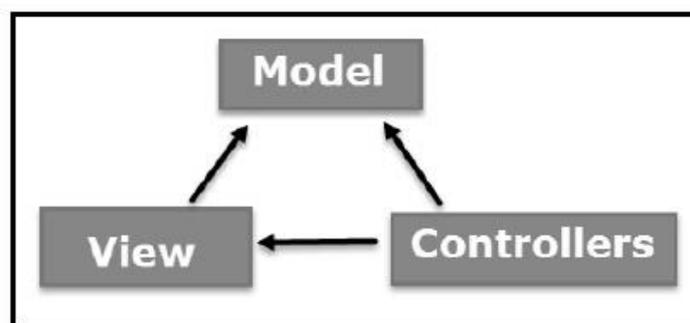
The PHP framework is frequently used in the construction of medium-sized and large-scale information systems, as well as small-scale ones. The choice of frameworks and database access techniques become crucial while creating information systems. A PHP framework called CodeIgniter provides speed and RESTful API connectivity between two relevant servers. For the creation of a model of information system development, the Framework model choice is best suited for the creation of small-scale information systems. A school management system is the actual execution of a developed system.

### I. INTRODUCTION

The application development framework CodeIgniter has a minimal footprint, which makes it significantly faster than other framework. Ellis Lab Published it on February 28,2006. It reduces the amount of code required to complete a task and offers simple answers to challenging coding issues. PHP websites can be created utilizing the application development framework CodeIgniter. The framework is open source. It includes a highly comprehensive set of features, which will hasten website creation process. CodeIgniter will make your task easier. It has a very rich set of libraries and helpers. website built in CodeIgniter is secure too, as it has the ability to prevent various attacks that take place through websites.

### II. METHODOLOGY

An application is divided into three primary logical components using the Model-View-Controller (MVC) architectural pattern: the model, the view, and the controller. Each of these parts is designed to handle particular application development facets. One of the most popular and widely accepted web development frameworks for building scalable and flexible applications is MVC.



#### Model

The user's whole data-related logic correlates to the Model component. This might be used to represent any additional business logic-related data or the data that is passed between the View and Controller components. As an illustration, a customer object will get customer data from the database, change it, and update it data back to the database or utilize it to render data.

#### View

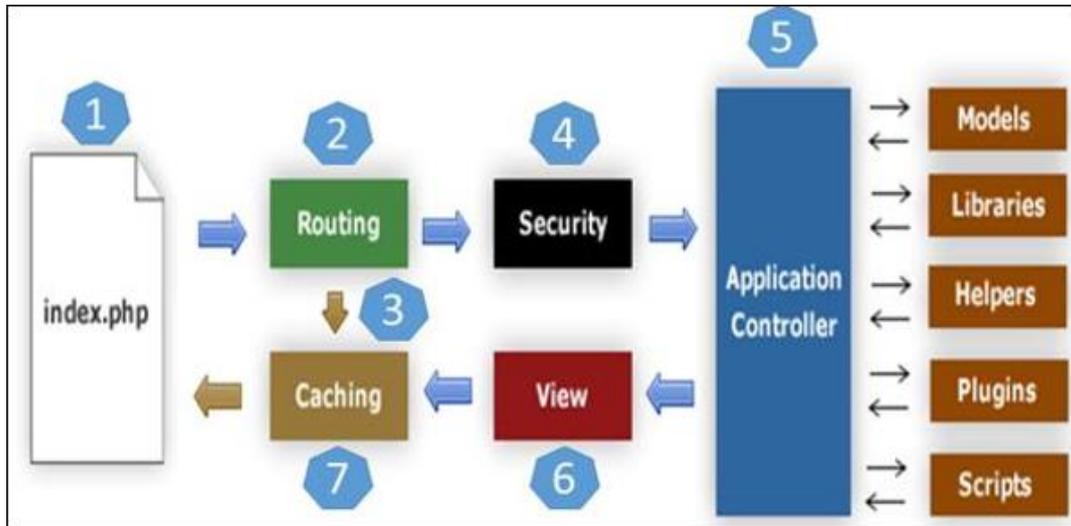
The application's entire UI functionality is implemented in the View component. For instance, the Customer view will have every UI element that the end user interacts with, such as text fields, dropdown menus, etc.

#### Controller

Controllers serve as an interface between the Model and View components, processing all business logic and incoming requests, utilising the Model component to alter data, and interacting with the Views to provide the

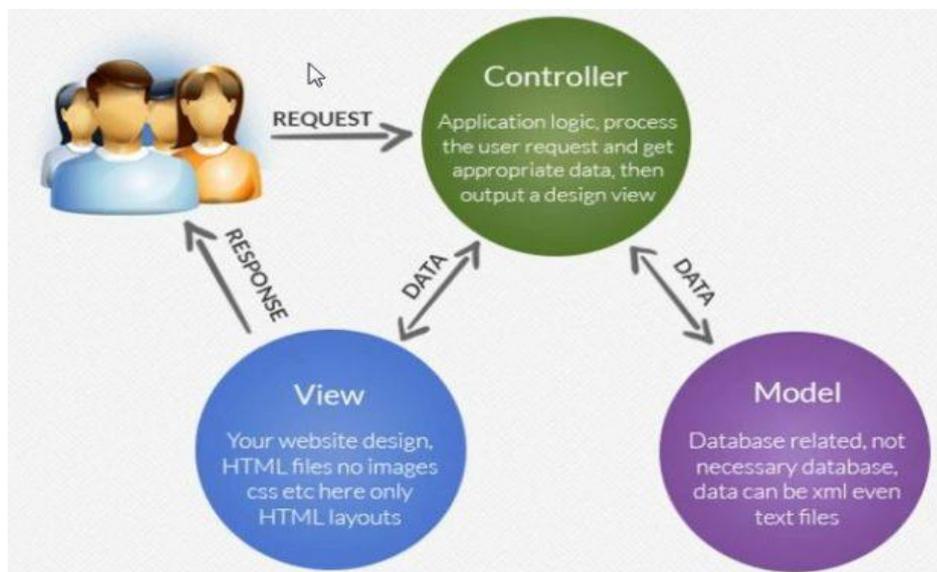
desired result. For instance, the Customer controller will manage all of the inputs and interactions from the Customer View and update the database with the help of the Customer Model. To display the customer data, the same controller will be employed.

### III. MODELING AND ANALYSIS



**Figure 1:** Architecture of CodeIgniter

Model View Controller is a relatively familiar concept in web application development, starting with Small Talk programming language, MVC separates application development based on main components that build an application such as data manipulation, user interface, and part of application control.



### IV. RESULTS AND DISCUSSION

The CodeIgniter directory structure is divided into 3 folders –

- Application
- System
- User guide

#### Application

As the name indicates the Application folder contains all the code of your application that you are building. This is the folder where you will develop your project. The Application folder contains several other folders.

- Cache

- Config
- Controllers
- Logs, etc.

#### **System**

This folder contains CodeIgniter core codes, libraries, helpers and other files, which help make the coding easy. These libraries and helpers are loaded and used in web app development.

- Core
- Database
- Fonts
- Helpers, etc.

#### **User guide**

This serves as your CodeIgniter user manual. Essentially, it is an offline version of the CodeIgniter website's user manual. By using this, one may become familiar with the capabilities of various libraries, helpers, and classes. Before creating your first web application with CodeIgniter, it is advised to read this user guide.

In addition to these three directories, there is another crucial file called "index.php." We may declare the system and application folder names, as well as the application environment and error level, in this file. If you don't know enough about what you're doing, it is advised against changing these settings.

### **V. CONCLUSION**

CodeIgniter is one of the best and preferred platforms for PHP that has been widely used by developers to create an application. It helps developers detect the bugs instantly and show errors or warnings. This is why it is very easy to fix bugs during development.

### **VI. REFERENCES**

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