6.1

Introduction.

Laravel is primarily used to create custom web apps using the coding language of PHP. It’s a web framework that controls many aspects of the coding that are tedious to create like, routing authentication and creating a HTML template. It’s a backend tool running entirely server-side, since it uses PHP. It uses a design pattern called Model-View-Controller. The model acts as the shape of the data your application runs on, the Controller interacts with the model. If a user makes a request to read a page, the controller reads the request and relays the info to the model. The controller uses the info to construct a view. We use Laravel version 9 which was released on 8th February 2022. We require at least Php version 7.3 to operate a fully functioning version of Laravel. Laravel has several advantages over other frameworks such as their high security such as using PDO to prevent sql injections. The easily understandable MVC architecture. Laravel also encourages quick and simple migration of the database. The simple syntax of the command line of Laravel. And the community support is huge for the Framework. These are all great reasons to use Laravel over its competitors.

6.2

MVC - Models

A model shows the logical structure of a database including relationships and constraints that determine how data can be stored and accessed. It helps in designing a database and serves as a blueprint for application developers and database admins in creating a database

MVC - Views

a View in the context of the MVC, is a software class that contains a template and a data form that produces a response for a browser. It receives data from the Controller of the MVC and packages it and presents it to the browser for display

MVC - Controller

A controller is responsible for controlling the way that a user interacts with an MVC app. A Controller contains the flow control logic for a MVC app. A controller determines what response to send to a user when a user makes a request. Php artisan make: controller Password Controller creates a controller in app/http/controllers

6.3

User Authentication

Database authentication is the process or act of confirming that a user who is attempting to log into a database is authorized to do so, and is only accorded the rights to perform activities that he or she has been authorized to do

6.4

Laravel Routing

The most basic Laravel routes accept a URL and a closure, providing a very simple and expressive method of defining routes and behavior without complicated routing configuration files. In our project we will begin by defining routes in our routes/web.php file.

6.5

Middleware

Middleware provides a convenient mechanism for inspecting and filtering HTTP requests entering your app, for example, Laravel includes a middleware that verifies the user of your application is authenticated. If a user is not authenticated, the middleware will redirect the user to your apps login screen, but if they are given permission to view the middleware will proceed, basically acting as a bodyguard to important files. All the middleware files are located in app/http/middleware