EQRAA

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ACKNOWLEDGEMENT

ABSTRACT

We all know that reading is good for mind and soul it opens people mind
For new things they didn't know before.
But there is always the problem of what to read or who is a good writer to follow?
Our application solves this problem by offering a social media platform specified for readers.
Read along to know more about our solution.

CHAPTER 1 : Introduction

Introduction

First of all the idea came to our minds when we looked around and we found that there was no place where people share specifically their reading interests and where they can make friends depending on their common interests. In all social media platforms people share different things about themselves but there is no place achieves to its users what we are going to do. The users will be able to know much more about different books and see peoples' opinions which will encourage them to read more and go back and share their opinions about these new readings. They will keep in touch with trending books. They will make solid friendships with people who share the same interests and that will pull them deeply to dive and spend time on our platform.

Secondly, the writers are with no way near to their followers and they hardly listen to each other. This is our second big strength point, the writers now can easily reach their followers and increase them. They can talk about their new books and listen from people which will give them ideas behind their minds and will push them to grow in their careers. The writers can prepare events where people could gather and discuss the new books with others and with the writer himself. The writer can also make money and sell more copies of his book on our platform.

Here we come to talk to our revenue sources. We will be able to make money from different resources. First of all, the sales of books on our application. Secondly, the advertising from the writers to show off and become more trending and from other resources where they will be willing to make use of the high traffic on our application.

Future releases plans

In the future releases there are plans to hit the ground and widen the work to reach the streets. We will make events on the grounds where writers will come to share their new books and this will offer a great revenue to us. We will make use of the tickets and make advertising to spread our app more. We will arrange events for junior writers where there will be heavy names in this field so they can learn more from them.
We will build co-working spaces where our users who become friends will be able to meet and spend a lot of fun time reading what they like together and share opinions.
Our app is promising and different and there are alot of ideas which can add to it a lot. That's why we stuck to it and put our time investing in this idea which we see different and can rock in the future.

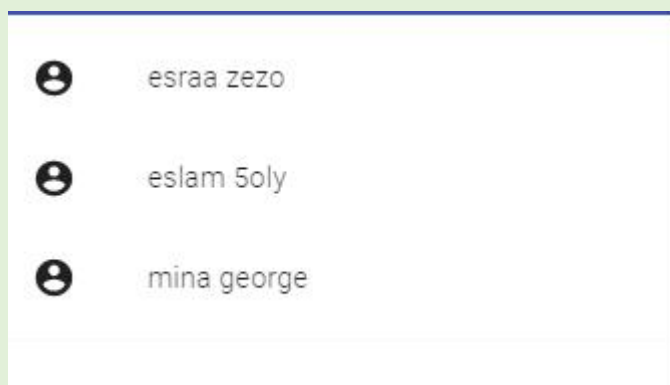# CHAPTER 2: Project Guide

Landing Page

Home
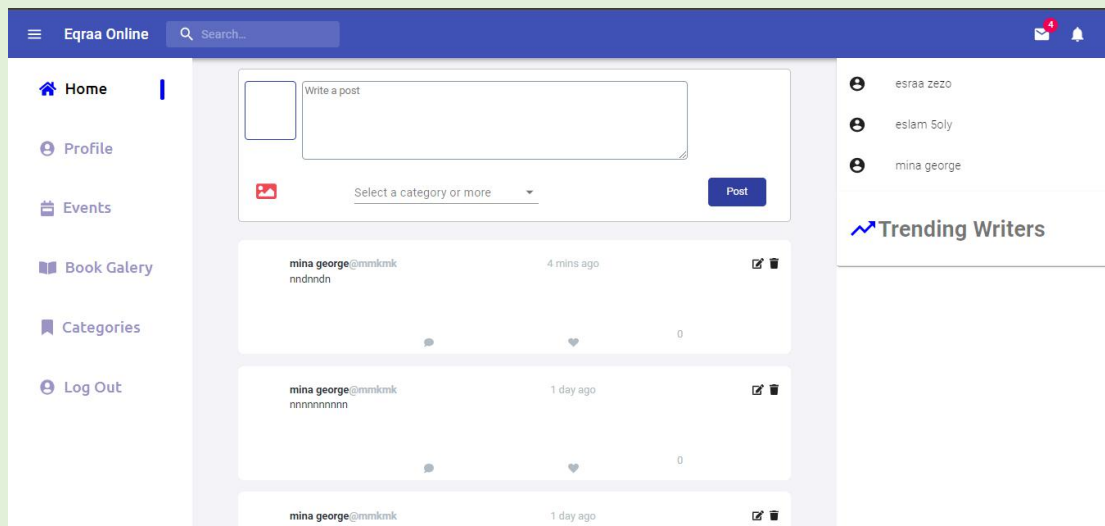
Trending writers

Show the trending writers on the website.

Chat List

List that show your friends and you can that with them.
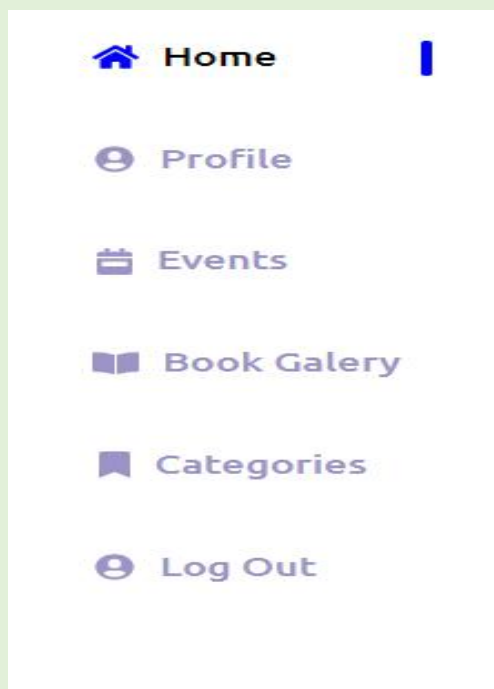
Chat Box

By pressing on any friend on the chat list a chat box will shown
And you can chat with that friend privately.
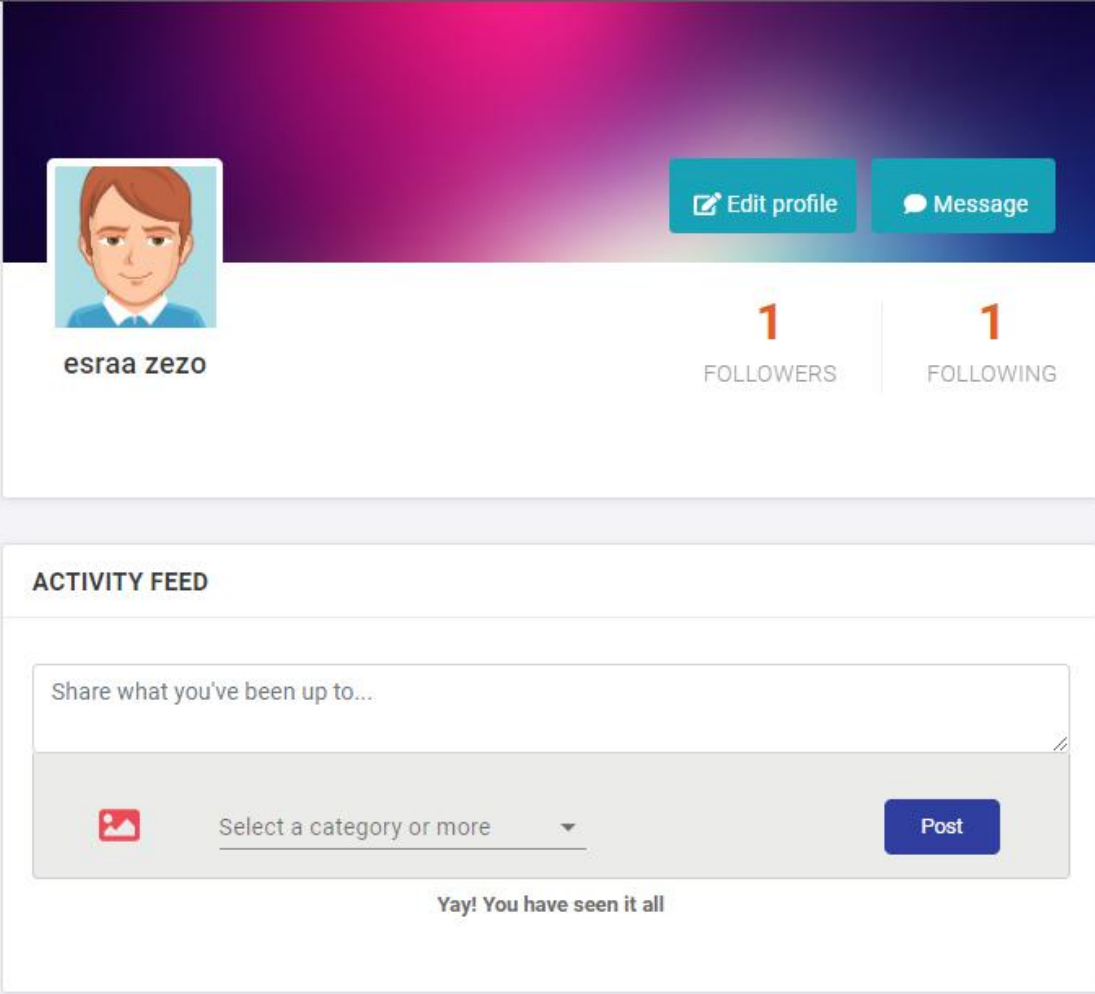
Side Navbar

Navbar that enable you to navigate to any section of the website

Profile

Events

Where you can see the events you interested in.

Books Gallery

Where you can see books that are provided on the website and you can ask for a PDF copy.
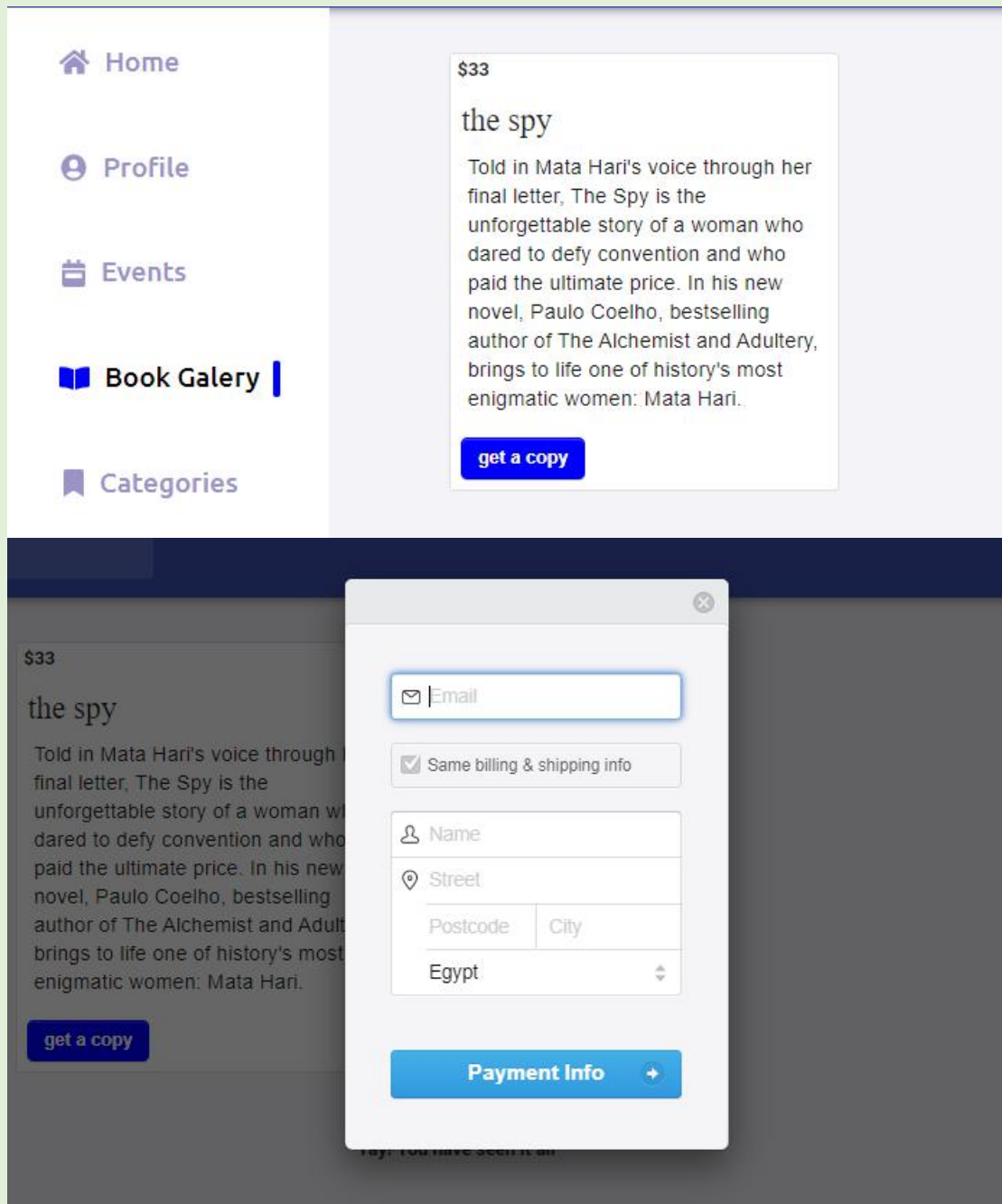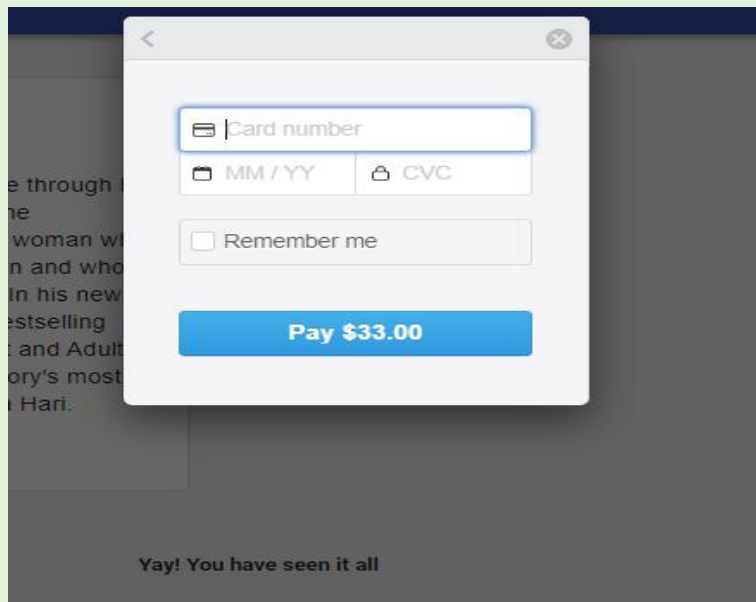
Categories

Where you can add your favorite books categories to reach it easily.

Navbar menu:
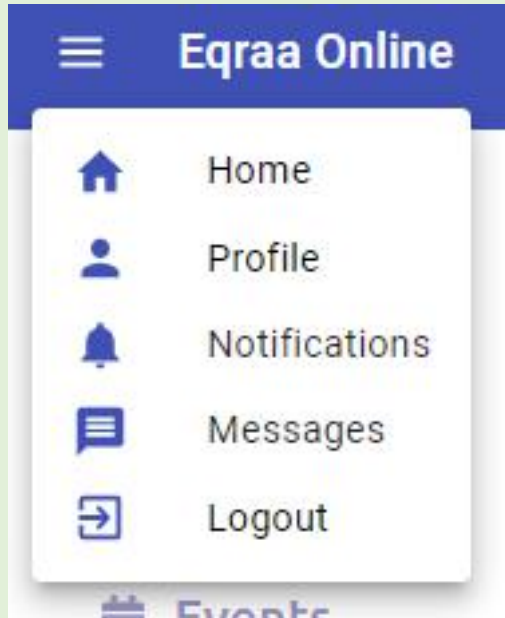
Search Bar:
You can search for your friends and visit their profiles.
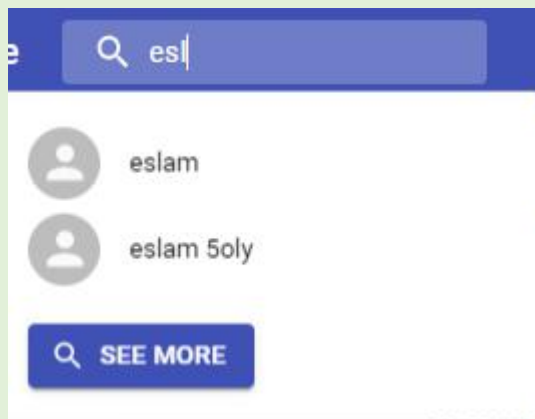
Search...
esla

🔍 SEARCH

R   eslam
     Joined 2020-06-25T00:00:00.000000Z   ⋮

eslam@gmail.com

👤 VIEW PROFILE

R   eslam 5oly
     Joined 2020-06-26T11:43:39.000000Z   ⋮

eslamn@gmail.com

👤 VIEW PROFILE

Search...
esla

🔍 SEARCH

R   eslam
     Joined 2020-06-25T00:00:00.000000Z

eslam@gmail.com

👤 VIEW PROFILE

CHAPTER 3 : Work Flow

Gathering the team

In the beginning each of us wanted to create a project we didn't work on anything like it before, Each one of us worked with at least 2 other team members so it was easy to get together and decide we want to be in the same team .

Deciding on the idea

First we had 2 ideas to choose from after some meeting we agreed to this idea because of the following
I.   We will be working with large scale application.
II. We will learn about relations.
III. The project accepts many feature which means a lot of possibilities to learn new things.
IV. Recently many people have been posting about reading.
V.   Developing social media platform with in app purchase is great for business we have passive income from purchase percentage and can add active income through ads and offering our services

Choosing tools

I.   We wanted to use MERN for development but we were short on time so we decided to use Laravel with React
II. Laravel helped us develop backend api as fast as possible and react is great for developing interactive frontend and manipulating the components to display any information we want with ease
III. As none of us have experience with designing we agreed to use material ui built in components for designing out ui
IV. and finally for code integration we used git

Code Steps

I.   Defining structure for working life cycle
II. Defining database structure
III. Working with micro migrations
IV. Create laravel api for integration with react
V.   Create axiousinterceptor to communicate with the api
VI. Create context to handle current user data
VII.   Managing user session with JWT
VIII.   Add registration and login
IX. Add home component
X.   Add navigation
XI. Add user and writer profiles
XII.   Add categories and events
XIII.   Add books
XIV.   Add chat and notifications
XV.   Testing and integration checks

Design and finishing

As mentioned above we don't have the required design knowledge to put a good layout.
We agreed to do our best to come up with a nice UI.
After working and putting effort in making a nice looking UI while working on the main functionality on the project we decided to ask expert designers for help.
We used linkedin to reach out for someone to check our latest design and give us feedback.
Luckily we got some promising advice and started implementing them into the project to give it the look and feel of professional applications.

CHAPTER 4 : Front-End

Front-end Technologies used

At Eqraa project we decided to work using

1. React javascript framework
2. React matrial ui
3. Bootstrap4

What is react?

React.js is an open-source JavaScript library that is used for building user interfaces specifically for single-page applications. It's used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components. React was first created by Jordan Walke, a software engineer working for Facebook. React first deployed on Facebook's newsfeed in 2011 and on Instagram.com in 2012.
React allows developers to create large web applications that can change data, without reloading the page. The main purpose of React is to be fast, scalable, and simple. It works only on user interfaces in the application. This corresponds to the view in the MVC template. It can be used with a combination of other JavaScript libraries or frameworks, such as Angular JS in MVC.

What are React.js Features?

Let us take a closer look at some important features of React.

1. JSX

In React, instead of using regular JavaScript for templating, it uses JSX. JSX is a simple JavaScript that allows HTML quoting and uses these HTML tag syntax to render subcomponents. HTML syntax is processed into JavaScript calls of React Framework. We can also write in pure old

JavaScript.

2. Single-Way data flow

In React, a set of immutable values are passed to the components rendered as properties in its HTML tags. The component cannot directly modify any properties but can pass a call back function with the help of which we can do modifications. This complete process is known as "properties flow down; actions flow up".
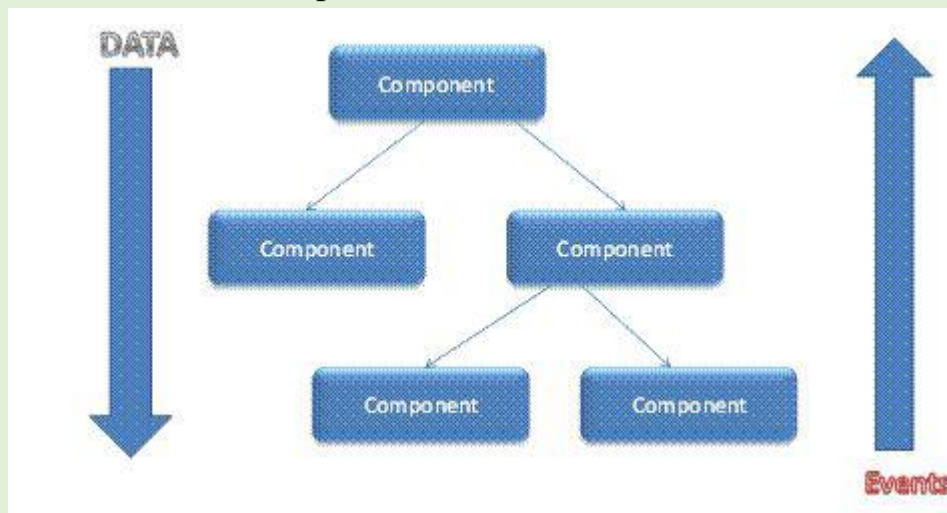
3. Virtual Document Object Model

React creates an in-memory data structure cache which computes the changes made and then updates the browser. This allows a special feature that enables the programmer to code as if the whole page is rendered on each change whereas react library only renders components that actually change.

View / React — Virtual DOM / Real DOM
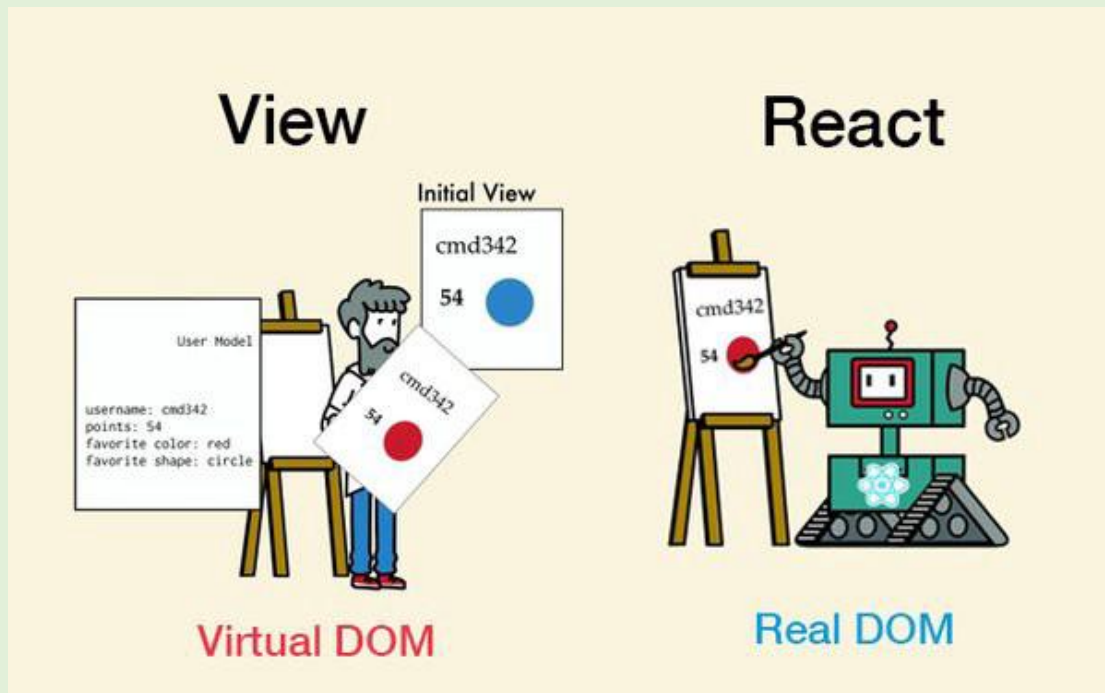
Why React?

Now, the main question arises in front of us is why one should use React. There are so many open-source platforms for making the front-end web application development easier, like Angular. Let us take a quick look on the benefits of React over other competitive technologies or frameworks. With the front-end world-changing on a daily basis, it's hard to devote time to learning a new framework – especially when that framework could ultimately become a dead end. So, if you're looking for the next best thing but you're feeling a little bit lost in the framework jungle, I suggest checking out React.

1. Simplicity

ReactJS is just simpler to grasp right away. The component-based approach, well-defined life-cycle, and use of just plain JavaScript make React very simple to learn, build a professional web (and mobile applications), and support it. React uses a special syntax called JSX which allows you to mix HTML with JavaScript. This is not a requirement; Developer can still write in plain JavaScript but JSX is much easier to use.

2. Easy to learn

Anyone with a basic previous knowledge in programming can easily understand React while Angular and Ember are referred to as 'Domain-specific Language', implying that it is difficult to learn them. To react, you just need basic knowledge of CSS and HTML.

3. Native Approach

React can be used to create mobile applications (React Native). And React is a diehard fan of reusability, meaning extensive code reusability is supported. So at the same time, we can make IOS, Android and Web applications.

4. Data Binding

React uses one-way data binding and an application architecture called Flux controls the flow of data to components through one control point – the dispatcher. It's easier to debug self-contained components of large ReactJS apps.

5. Performance

React does not offer any concept of a built-in container for dependency. You can use Browserify, Require JS, EcmaScript 6 modules which we can use via Babel, ReactJS-di to inject dependencies automatically.

6. Testability

ReactJS applications are super easy to test. React views can be treated as functions of the state, so we can manipulate with the state we pass to the ReactJS view and take a look at the output and triggered actions, events, functions, etc.

React matrial ui

React components for faster and easier web development. Build your own design system

Matrial ui installation

Install Material-UI's source files via npm. We take care of injecting the CSS needed.

```
$ npm install @material-ui/core
```

or use a CDN.
Load the default Roboto font.

```
<link rel="stylesheet"
href="https://fonts.googleapis.com/css?family=Roboto:300,400,500,700&display=swap" />
```

Matrial ui usage
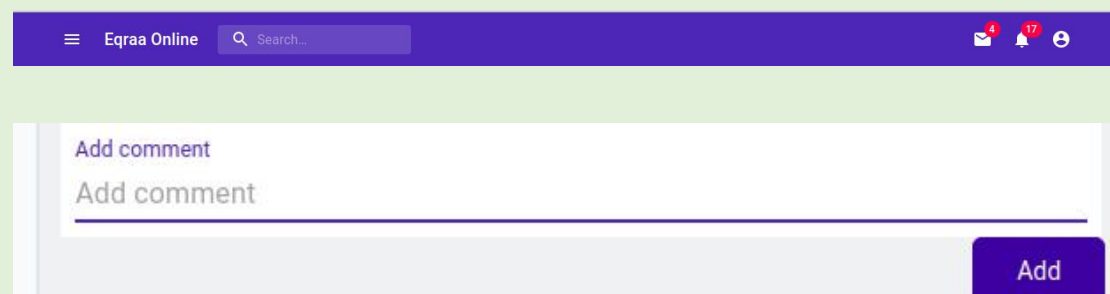
Material-UI components work without any additional setup, and don't pollute the global scope.

```
import React from 'react';import { Button } from '@material-ui/core';

function App() {

    return <Button color="primary">Hello World</Button>;}
```

We used a lot of matrial ui components Like

➢ App Bar
➢ TextFiled
➢ grids for layout
➢ icons
➢ Single line Grid list
➢ Modal
➢ Cards

Dr. Jamarcus Breitenberg
Joined 2020-06-12T21:11:03.000000Z

stanton.odessa@example.org

+ FOLLOW   VIEW PROFILE
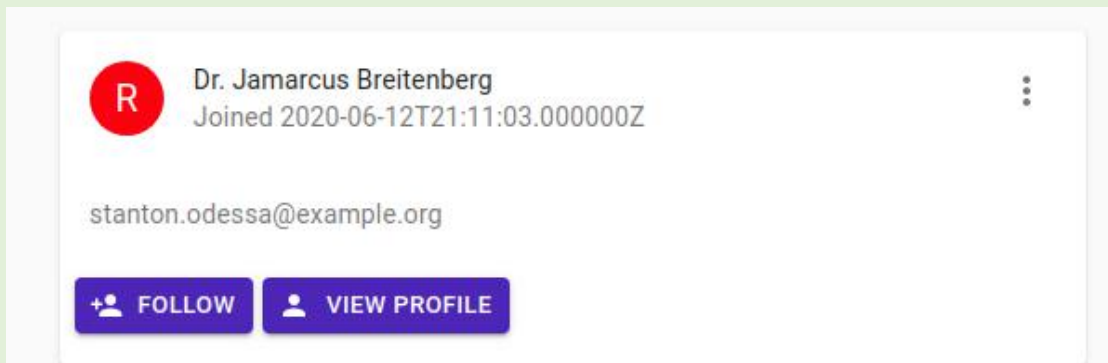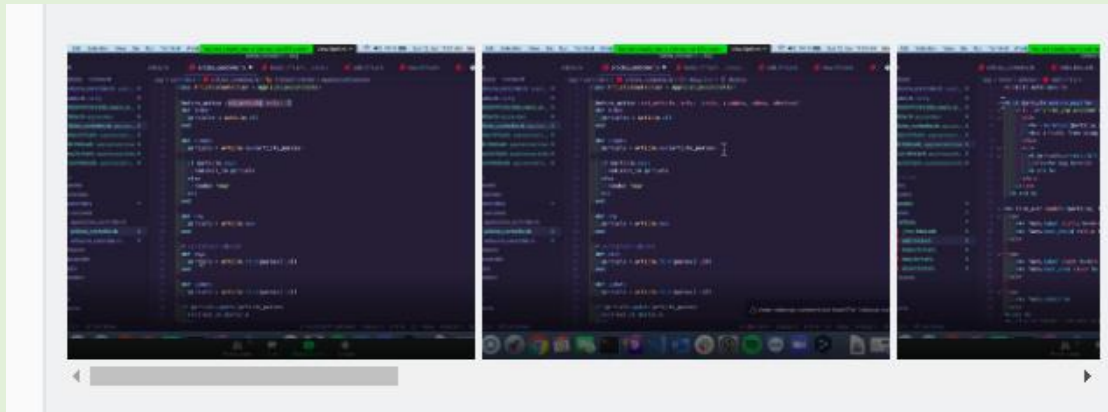
Bootstrap4

➢ Bootstrap is a free front-end framework for faster and easier web development
➢ Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
➢ Bootstrap also gives you the ability to easily create responsive design

Chapter5 Back-end
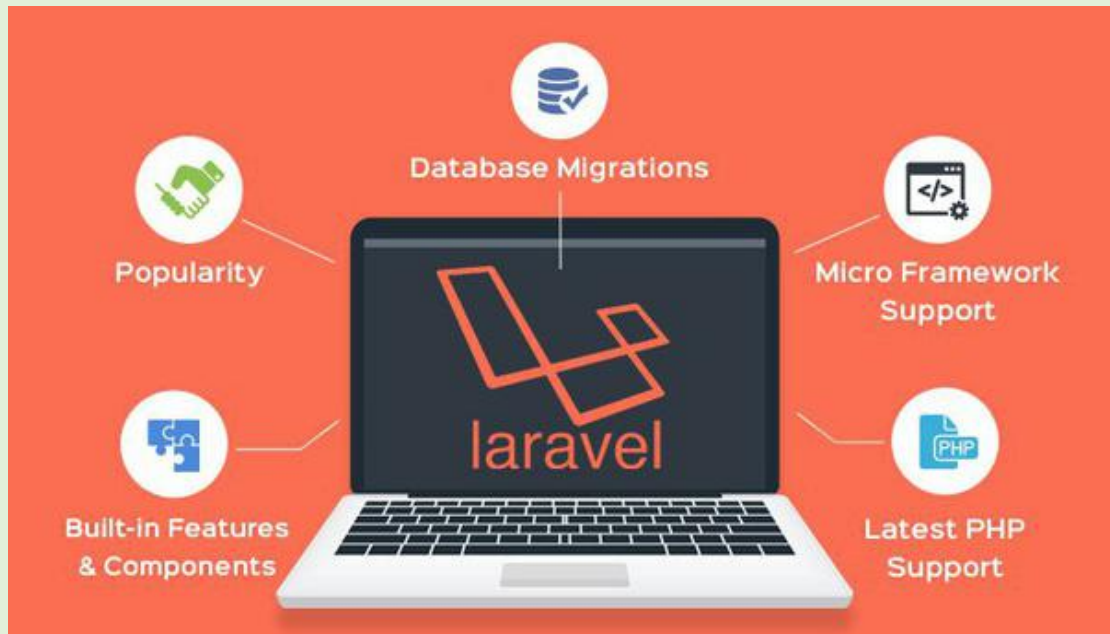
Back-end Technologies & Dependencies:

- Php Using (Laravel Framework)
- MySql Database (Relational Database)
- Passport For (Authentication)
- Google Service (Send Mail)
- Pusher For Communication (Real-time)
- Laravel Eloquent ORM (Relationship)
- Task Scheduling (Cron Jobs)

What is Laravel ?

Laravel is a free, open-source PHP web framework, created by Taylor Otwell and intended for the development of web applications following the model–view–controller (MVC) architectural pattern and based on Symfony. ... The source code of Laravel is hosted on GitHub and licensed under the terms of MIT License.

Why Laravel ?

1. Laravel is The Most Organized Framework Right Now Because its Powerful Features Like
   - Security
   - MVC SUPPORT
   - Seeds & Testing
   - Api Resources
   - Validations
   - Authentication & Authorization
   - Middlewares
   - Migrations
   - Policies
   - Task Scheduling (Cron Jobs)
   - Email Services
   - Real-time Interactive

We Will Discuss Every point in the Next Page

That all the most things which Takes a lot of time to build a Application and make it up and running
So By using Laravel you can make it So Easy
and Just Focus on the Logic and how to built Your Application

2. Laravel is the most Stable Framework Right now Regards to Laravel Open-Source Community

3. Laravel Today is The Most Popular Back-end Framework Today and All Developers loves it because its flexibility and how every thing is clear and easy in it

REASONS WHY LARAVEL IS THE BEST PHP FRAMEWORK

1. MVC SUPPORT

which makes Laravel the best PHP framework is it supports MVC Architecture like Symfony, ensuring clarity between logic and presentation. MVC helps in improving the performance, allows better documentation, and has multiple built-in functionality. Here's how the MVC works for Laravel.
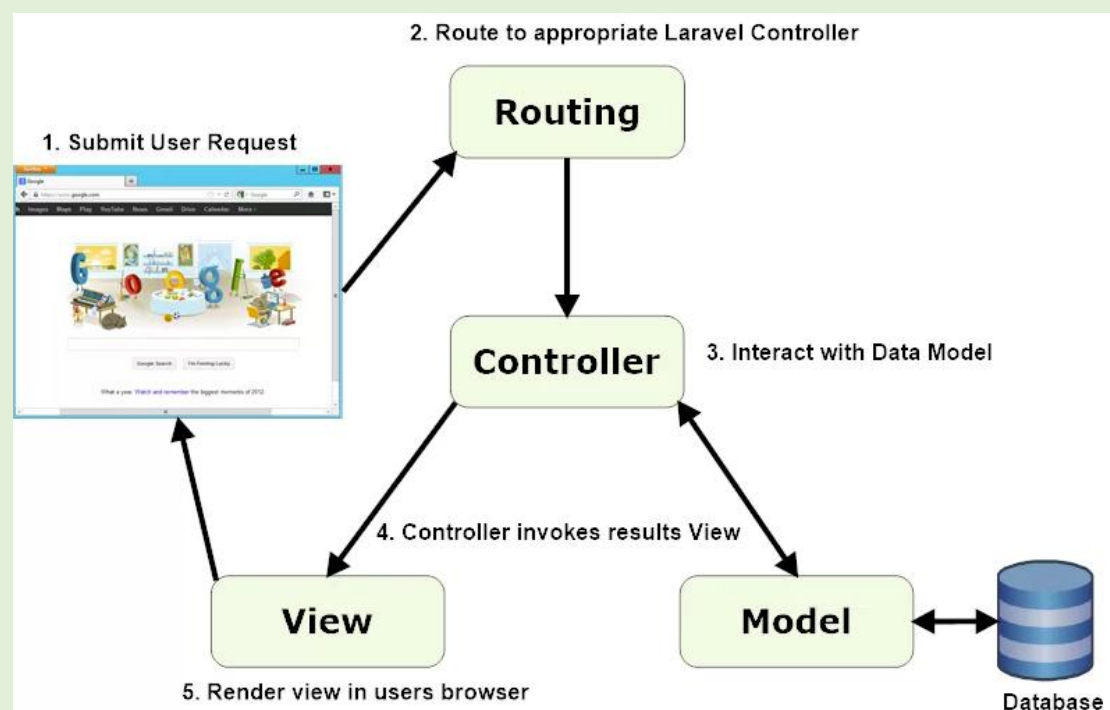
2. AUTHORIZATION TECHNIQUE

implementation of authentication techniques very simple. Almost everything is configured extraordinarily. Laravel also provides a simple way to organize authorization logic and control access to resources.

3. SECURITY

everyone has to use some of the other ways too make the application secure. Laravel takes care of the security within its framework. It uses salted and hashed password, which means that the password would never save as the plain text in the database. It uses Bcrypt hashing algorithm for generating an encrypted representation of a password. Laravel uses prepared SQL statements which make injection attacks unimaginable. Along with this, Laravel provides a simple way to escape user input to avoid user injection of <script> tag. Here are the security features that Laravel offers

4. DATABASE MIGRATION

developers is to keep the database in sync between development machines. With Laravel database migrations, it is extremely easy. After the long work hours, you may have made a lot of changes to the database and, in our option,

```php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;

Unsaved changes (cannot determine recent change or authors)
class CreateEventsTable extends Migration
{
    public function up()
    {
        Schema::create('events', function (Blueprint $table) {
            $table->bigIncrements("id");
            $table->string("name");
            $table->longText("description");
            $table->string("location");
            $table->dateTime('start_date');
            $table->dateTime('end_date');
            $table->unsignedBigInteger("user_id");
            $table->foreign("user_id")->references("id")->on("users")->onDelete('cascade');
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('events');
    }
}
```

5. OBJECT-ORIENTED LIBRARIES

which make Laravel the best PHP framework is it has Object Oriented libraries and many other pre-installed ones, which are not found in any other popular PHP frameworks. One of the pre-installed libraries is the Authentication library. Although it is easy to implement, it has many advanced features, such as checking active users, Bcrypt hashing,   password reset, CSRF (Cross-site Request Forgery) protection, and encryption.

6. Api Resources

To handle inconsistencies in API resource responses, we may update the model with what should be returned when we call a model instance.
Following the Concept [Send What You Need]

```php
eslam, 16 days ago | 1 author (eslam)
<?php

namespace App\Http\Resources;

use Illuminate\Http\Resources\Json\JsonResource;
use App\User;

eslam, 16 days ago | 1 author (eslam)
class Post extends JsonResource
{
    public function toArray($request)
    {
        return [        eslam, 25 days ago • Post RESTful Api's
            'id' => $this->id,
            'body_content' => $this->body_content,
            'user' => $this->user,
            'likes' => $this->likes->count(),
            'files' => $this->postFiles,
            'created_at' => $this->created_at,
            'genres' => $this->genres
        ];
    }
    public function with($request){
        return [
            'version' => '1.0.0',
            'posts_url' => url("http://127.0.0.1:8000/api/post")
        ];
    }
}
```