

# PROJECT NAME: BOOKING\_API

## INTRODUCTION

It is a Laravel-9-API project containing information related to User's Booking for sports venues like futsal, cricketsal, etc around specific places.

## HOW DOES AN API WORK?

API is the messenger that delivers your request to provider that you're requesting it from and then delivers the response back to you.

In our case, provider is the back-end of the project created in laravel, where it fetches and stores data into database.

Requests are made by front-end side of the website.

## CREATE A LARAVEL PROJECT

**Step 1:** Make sure you have PHP version 7.2.5 or greater. If not, install the latest version of XAMMP or PHP.

**Step 2:** Install composer.

**Link:** <https://getcomposer.org/download/>

**Step 3:** Open the command prompt or PowerShell window on the directory you want to install the laravel project and write the command: ***composer create-project laravel/laravel example-app***.

It will take some time and the folder structure looks like in the picture below:

TechMauri > booking-api					
	Name	Date modified	Type	Size	
	.git	11/10/2022 5:55 PM	File folder		
Personal	app	10/28/2022 7:23 PM	File folder		
	bootstrap	10/28/2022 7:23 PM	File folder		
	config	10/28/2022 7:23 PM	File folder		
	database	10/28/2022 7:23 PM	File folder		
	lang	10/28/2022 7:23 PM	File folder		
	public	10/28/2022 7:23 PM	File folder		
	resources	10/28/2022 7:23 PM	File folder		
	routes	10/28/2022 7:23 PM	File folder		
	storage	10/28/2022 7:23 PM	File folder		
	stubs	11/10/2022 4:26 PM	File folder		
	tests	10/28/2022 7:23 PM	File folder		
	vendor	11/9/2022 4:36 PM	File folder		
	.editorconfig	10/28/2022 7:23 PM	Editor Config Sour...	1 KB	
	.env	11/10/2022 4:14 PM	ENV File	2 KB	
	.env.example	10/28/2022 7:23 PM	EXAMPLE File	2 KB	
	.gitattributes	10/28/2022 7:23 PM	Text Document	1 KB	
	.gitignore	10/28/2022 7:23 PM	Text Document	1 KB	
	artisan	10/28/2022 7:23 PM	File	2 KB	
	composer	11/10/2022 5:20 PM	JSON Source File	2 KB	
	composer.lock	11/9/2022 4:33 PM	LOCK File	279 KB	
	package	10/28/2022 7:23 PM	JSON Source File	1 KB	
	phpunit	10/28/2022 7:23 PM	XML Document	2 KB	
	README	10/28/2022 7:23 PM	Markdown Source ...	5 KB	
	vite.config	10/28/2022 7:23 PM	JavaScript File	1 KB	

## BACK-END

### DATABASE

The name of the MySQL database is techmauri\_dev whose tables are attached with this file.

### MODELS

There are two models in the project :

**Booking**-for connecting the booking table from the database.

**User**-for connecting the users table from the database.

### CONTROLLERS

**Booking\_api**-This controller generates all the user's booking information API.

Route: Domain\_name/api/booking

**Post\_booking\_api**-This controller is a post API to add the booking details of the users to the database.

Route: Domain\_name/api/addbooking

**UserRegistration**-This controller is a post method API to register authorized user to the API.

Route: Domain\_name/api/register

**UserLogin** -This controller is also a post-method API to verify the user.

Route: Domain\_name/api/login

**Note:** In place of Domain\_name, localhost IP with port number should be used for local machines.

Example: <http://127.0.0.1:8000/api/register>.

## SECURITY

Sanctum authentication is done to avoid unauthorized access to the API.

Authentication tutorial: <https://youtu.be/P2dfXpUHy6U>

## API VERIFICATION IN POSTMAN

The screenshot shows a Postman interface for a GET request to `http://127.0.0.1:8000/api/booking`. The request has an Authorization header with a Bearer token. The response is a 200 OK status with a response time of 854 ms and a size of 468 B. The response body is displayed in JSON format, showing a successful booking creation with the following details:

```
{
  "B_id": 1,
  "I_id": 100,
  "B_time_start": "2022-11-10 15:43:28",
  "B_time_end": "2022-11-10 15:43:28",
  "I_price": "1500",
  "B_date": "2022-11-10 15:43:28.059444",
  "U_id": 100
}
```

# **FRONT-END**

Every end points like login, registration, booking data, item data needs to be presented in a user-friendly UI.

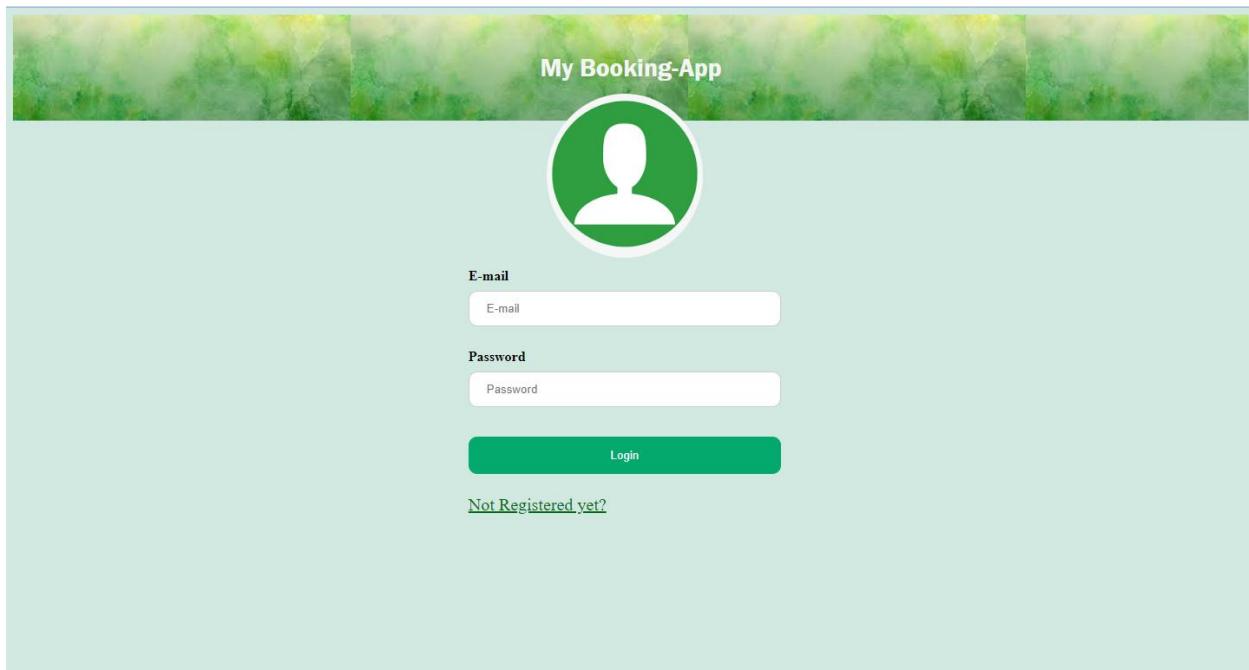
First, when we browse the UI, we are directed to the login page as it is a secure API.

## **Login Page**


The page verifies user who is accessing the website.

The page makes a post-api requests for the verification and acts on the basis of response from the back-end.

The page also registers user into a session with id and name.



My Booking-App



E-mail

Password

Login


[Not Registered yet?](#)

## **Registration Page**

The page registers a new user to the system with some necessary requirements.

This page also makes a post api request and delivers data to the back-end where the back-end stores the user's into the database.

# My Booking-App



**Name**

**E-mail**

**Password**

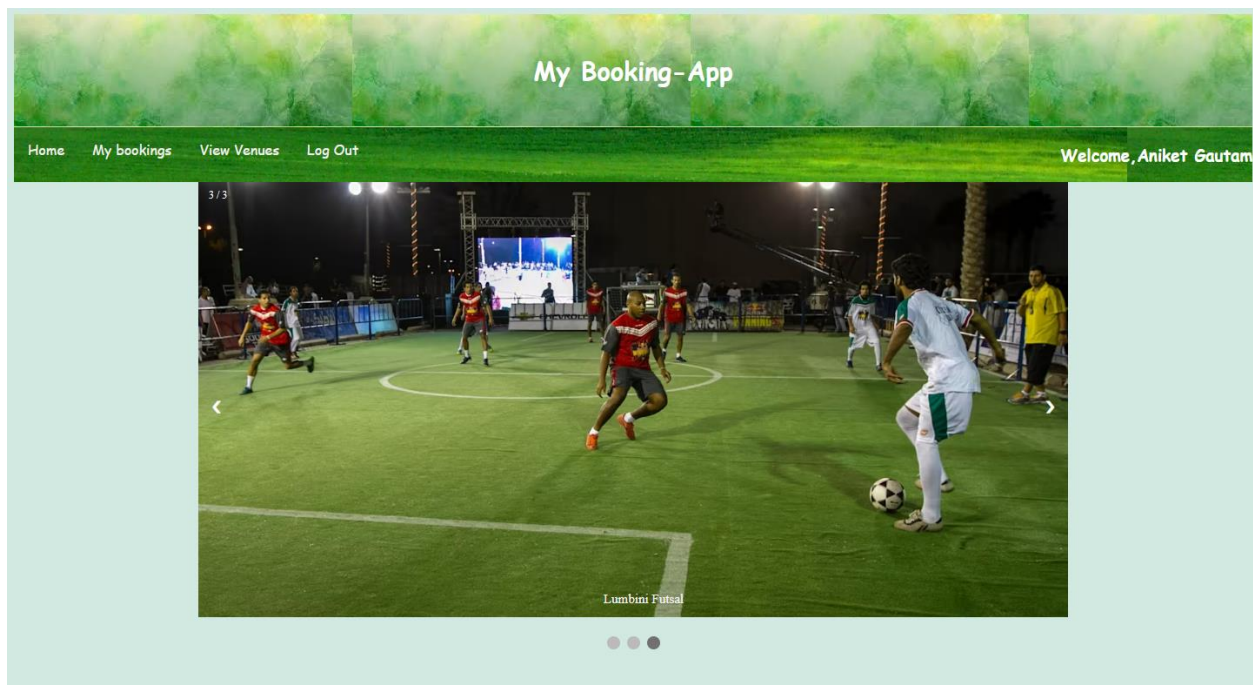
**Confirm Password**

Register

[Already registered?](#)

## Home Page

The first page where user gets directed.



## Items Page

This is the main page which makes get API requests to fetch all the required data from the API.

## Code in controller:

```
app > Http > Controllers > Item_display_controller.php > PHP Intelephense > Item_display_controller > index
1  <?php
2
3  namespace App\Http\Controllers;
4
5  use Illuminate\Http\Request;
6  use Illuminate\Support\Facades\Http;
7  class Item_display_controller extends Controller
8  {
9      function index()
10     {
11         $response= Http::withHeaders(['Authorization'=>'Bearer 2|XgTEJdrnVdg4T51TiNpBmHNZtHrRPmSH0gQic7WF','Accept'=>'application/json'])
12         ->get('http://127.0.0.1:8000/api/item')->json();
13
14         return view('items',['data'=>$response]);
15
16     }
17
18 }
19
20
21
```

## Page view:

My Booking-App

Home My bookings View Venues Log Out Welcome, Nikeeta Gautam

Search By Category: Gym Search

Make Bookings

Name	Price	Opening Time	Closing Time	Address	Contact	Rating	Facilities	Action
The Workout Station	1500	5AM	9PM	Naya Bazaar Marg		5	Drinking Water, Toilet, Changing Room, WI-FI	Book Now
Nepal Byayam Mandir	1500	7AM	9 PM	Jyatha Marg		4	Drinking Water, Toilet, Changing Room, WI-FI	Book Now
Fitness Studio Nepal	1500	6AM	9 PM	Narayanhiti Palace Museum North Gate Rd		4	Drinking Water, Toilet, Changing Room, WI-FI	Book Now
Platinum Fitness Club	1500	6AM	9 PM	Kathmandu		4	Drinking Water, Toilet, Changing Room, WI-FI	Book Now

The Book Now button helps the user make booking for the venue by redirecting it to the Reservation confirmation page.

Search by category is also implemented to make it easier to find the desired venue.

## Reservation Confirmation Page

The page has some hidden inputs in order to make post requests like Item\_id, U\_id and Item price.

The page also reassures with the user for the confirmation.

When “Reserve Now” button is clicked, it makes a post-api request with the help of controller and stores the booking information into the database with the help of back-end.

### Code in controller:

```
public function make_booking(Request $request)
{
    $response= Http::withHeaders(['Authorization'=>'Bearer 2|XgTEJdrnVdg4T51TInPbmHNZtHrRPmsH0gQiC7WF'])
->post('http://127.0.0.1:8000/api/addbooking',[
        "I_id"=>$request->I_id,
        "I_price"=>$request->I_price,
        "U_id"=>$request->U_id
    ]);
    dd($response->json());
}
```

### View:

Confirm Reservation

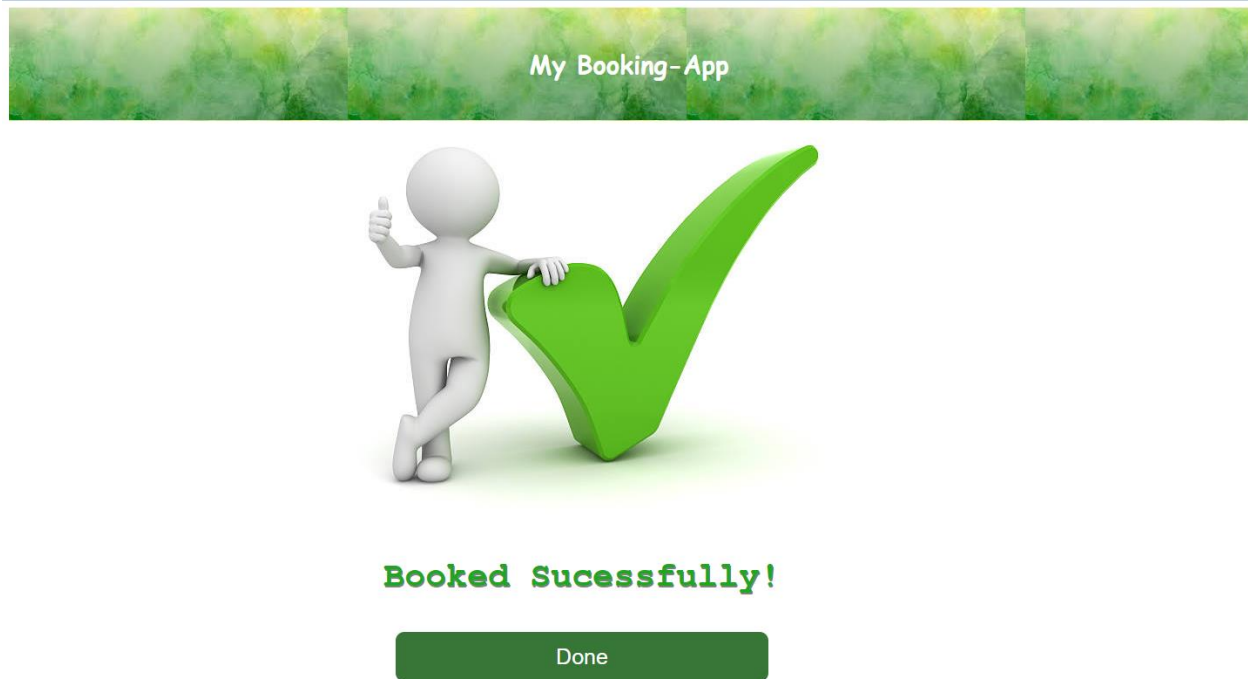
Venue:	Velocity Arena
Price:	1500
Time:	6AM-10PM
Address:	Ratopool
Contact:	9854621230
Rating:	4.3

Reserve Now



## Booked Successfully Page

After user confirms booking, he/she is directed to this page, displaying 'Successfully Booked' message to the user.



## My Bookings Page

This page displays all the booking for the specific users.

My Booking-App

Home

My bookings

View Venues

Log Out

Welcome, Aniket Gautam

My Bookings

Name	Price	Opening Time	Closing Time	Address	Contact	Booked On
Lumbini Futsal	1200	6AM	5PM	Chabahil	9856451230	2022-12-06 17:21:34
Highway Futsal	1200	6AM	5PM	Nayabasti	9856451235	2022-12-06 17:56:35
Dhanyentari Futsal	1500	6AM	5PM	Chabahil	9896456230	2022-12-07 11:24:05
Lumbini Futsal	1200	6AM	5PM	Chabahil	9856451230	2022-12-07 15:33:40
Lumbini Futsal	1200	6AM	5PM	Chabahil	9856451230	2022-12-08 18:06:34



THANK YOUU!!!