

Instructions on how to install Project on Laravel frameworks

1. Install Xampp Control Panel V3.3.0 with PHP version 7.4.29. Example below is my version of Xampp and PHP

Xampp Version	PHP Version
installdir=C:\xampp base_stack_name=XAMPP base_stack_key= base_stack_version=7.4.29-1 base_stack_platform=windows-x64	PHP 7.4.29 (cli) (built: Apr 12 2022 20:21:18) (ZTS Visual C++ 2017 x64) Copyright (c) The PHP Group Zend Engine v3.4.0, Copyright (c) Zend Technologies

2. Install Composer: Composer version 2.3.10 2022-07-13 15:48:23.
3. Open Command prompt if you are using windows for me I am using window operating system.
4. CD Xampp htdocs folder, example of my path: C:\xampp\htdocs
5. Install Laravel using composer type this code in your CMD:
composer create-project laravel/Laravel Assignment
(Assignment- this is the name to my project)
6. After the project has been created, start laravel local development sever using the laravel's Artisan CLI serve command.
Example: Open command prompt
cd Assignment folder in Xampp htdocs folder.
Then type: **php artisan serve**
7. Once you have started the artisan development server, application will be accessible in your web browser at <http://localhost:8000>

Instruction to create database:

1. After you installed Xampp
 - a. Go to your browser use your localhost IP address to php admin.
Example of my localhost phpMyAdmin: <http://localhost:8081/phpmyadmin/index.php>
 - b. Create New database. Mine I have named csd_project
 - c. Inside the **laravel** database create table called **2022_application_development_and_support_exam_data** and run sql query below:
-- phpMyAdmin SQL Dump
-- version 5.2.0
-- https://www.phpmyadmin.net/
--
-- Host: 127.0.0.1:3307
-- Generation Time: Aug 30, 2022 at 12:01 AM
-- Server version: 10.4.24-MariaDB
-- PHP Version: 7.4.29

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";

```

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

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-- Database: `laravel`
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-- Table structure for table `2022_application_development_and_support_exam_data`
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CREATE TABLE `2022_application_development_and_support_exam_data` (
  `Project_Ref` varchar(15) CHARACTER SET utf8 NOT NULL,
  `Country` varchar(31) CHARACTER SET utf8 DEFAULT NULL,
  `Implementing_Office` varchar(27) CHARACTER SET utf8 DEFAULT NULL,
  `Project_Title` varchar(195) CHARACTER SET utf8 DEFAULT NULL,
  `Grant_amount_USD` int(11) DEFAULT NULL,
  `Dates_from_GCF` datetime DEFAULT NULL,
  `Start_Date` datetime DEFAULT NULL,
  `Duration_months` int(11) DEFAULT NULL,
  `End_Date` datetime DEFAULT NULL,
  `Readiness_or_NAP` varchar(25) CHARACTER SET utf8 DEFAULT NULL,
  `Type_of_readiness` varchar(17) CHARACTER SET utf8 DEFAULT NULL,
  `First_disbursement_amount` decimal(9,2) DEFAULT NULL,
  `Status` varchar(27) CHARACTER SET utf8 DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

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-- Dumping data for table `2022_application_development_and_support_exam_data`
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INSERT INTO `2022_application_development_and_support_exam_data` (`Project_Ref`,
`Country`, `Implementing_Office`, `Project_Title`, `Grant_amount_USD`,
`Dates_from_GCF`, `Start_Date`, `Duration_months`, `End_Date`, `Readiness_or_NAP`,
`Type_of_readiness`, `First_disbursement_amount`, `Status`) VALUES
('ALB-RS-001', 'Albania, Romania', 'Europe Office', 'Readiness support to Albania',
300000, '2016-11-15 00:00:00', '2016-08-30 00:00:00', 12, '2017-08-30 00:00:00',
'Readiness', 'Capacity Building', '147500.00', 'completed'),

```

('BRA-RS-001', 'Brazil, Panama', 'Economy Division', 'Technology Needs Assessment for the Implementation of Climate Action Plans', 700000, '2018-06-20 00:00:00', '2018-06-20 00:00:00', 18, '2019-12-19 12:00:00', 'Readiness', 'FI/TNA/other', '197450.00', 'under implementation'),

('COM-RS-001', 'Comoros', 'Ecosystems', '1. Establishing and strengthening National Designated Authorities or Focal Points;\r\n2. Developing strategic frameworks for engagement with the GCF, including the preparation of country programmes', 426080, '2018-11-01 00:00:00', '2018-11-01 00:00:00', 24, '2020-10-21 00:00:00', 'Readiness', 'Capacity Building', '115117.00', 'under implementation'),

('CRI-RS-002', 'Costa Rica', 'Latin America Office', 'Building sub-national capacities for the implementation of the National Adaptation Plan in Costa Rica', 2861917, '2018-10-23 00:00:00', '2018-10-23 00:00:00', 36, '2021-10-23 00:00:00', 'National Adaptation Plans', 'NAP', '350575.33', 'under implementation'),

('DOM-RS-002', 'Dominican Republic', 'Latin America Office', 'Building capacity to advance National Adaptation Plan Process in the Dominican Republic', 2998325, '2018-07-11 00:00:00', '2018-07-11 00:00:00', 36, '2021-06-10 00:00:00', 'National Adaptation Plans', 'NAP', '1161912.00', 'under implementation'),

('EGY-RS-001', 'Egypt, Morocco', 'Ecosystems', 'Supporting Egypt's engagement with the Green Climate Fund: Logical framework support', 300000, '2017-05-02 00:00:00', '2017-04-24 00:00:00', 18, '2018-10-23 12:00:00', 'Readiness', 'Capacity Building', '122456.00', 'under implementation'),

('GHA-RS-001', 'Ghana, Uganda, Sudan', 'CTCN', 'Drought Early Warning and Forecasting System: Improving resiliency of crops to drought through strengthened early warning within Ghana, Uganda and Sudan', 300150, '2017-05-15 00:00:00', '2017-05-15 00:00:00', 24, '2019-05-10 00:00:00', 'Readiness', 'FI/TNA/other', '300150.00', 'completion report submitted'),

('HND-RS-002', 'Honduras', 'Latin America Office', 'Supporting strategic planning to engage with the GCF and comply with the national commitments under the Paris Agreement regarding the LULUCF sector', 764960, '2018-01-18 00:00:00', '2018-01-18 00:00:00', 18, '2019-07-19 12:00:00', 'Readiness', 'REDD+', '243515.00', 'under implementation'),

('JOR-RS-001', 'Jordan', 'West Asia Office', 'Strengthening NDA of Jordan to deliver on GCF Investment Framework', 300000, '2017-06-15 00:00:00', '2017-06-15 00:00:00', 18, '2018-12-14 12:00:00', 'Readiness', 'Capacity Building', '150000.00', 'under implementation'),

('MDG-RS-001', 'Madagascar', 'Ecosystems', 'Building Capacity in Madagascar to engage with the GCF', 300000, '2018-07-20 00:00:00', '2018-07-20 00:00:00', 12, '2019-07-19 00:00:00', 'Readiness', 'Capacity Building', '177588.00', 'under implementation'),

('MDV-RS-001', 'Maldives', 'Asia Pacific Office', 'Establishing and strengthening National Designated Authority (NDA), and developing strategic framework for engagement with the GCF in Maldives', 300000, '2017-06-16 00:00:00', '2017-06-16 00:00:00', 12, '2018-06-13 00:00:00', 'Readiness', 'Capacity Building', '198545.00', 'under implementation'),

('MLY-RS-002', 'Malaysia', 'Asia Pacific Office', 'Accessing REDD+ result-based payments in Malaysia', 819230, '2018-11-12 00:00:00', '2018-11-12 00:00:00', 24, '2020-11-13 00:00:00', 'Readiness', 'REDD+', '465695.33', 'under implementation'),

('MMR-RS-001', 'Myanmar', 'CTCN', 'Strengthened drought and flood management through improved science-based information availability and management in Myanmar', 336520, '2017-07-26 00:00:00', '2017-07-26 00:00:00', 12, '2018-07-26 00:00:00', 'Readiness', 'FI/TNA/other', '336520.00', 'under implementation'),

('MMR-RS-002', 'Myanmar', 'Asia Pacific Office', 'Establishing and Strengthening National Designated Authority (NDA), and Developing Strategic Framework for Engagement with the GCF in Myanmar', 300000, '2017-11-10 00:00:00', '2017-11-10 00:00:00', 18, '2019-05-11 12:00:00', 'Readiness', 'Capacity Building', '115840.00', 'under implementation'),

('MNE-RS-001', 'Montenegro', 'Europe Office', '1. Establishing and strengthening National Designated Authorities or Focal Points;\r\n2. Developing strategic frameworks for engagement with the GCF, including the preparation of country programmes', 300000, '2016-11-15 00:00:00', '2016-08-30 00:00:00', 12, '2017-08-30 00:00:00', 'Readiness', 'Capacity Building', '145300.00', 'under implementation'),

('MNG-RS-003', 'Mongolia', 'Asia Pacific Office', 'Scaling-up of Implementation of Low-Carbon District Heating Systems in Mongolia', 368000, '2018-02-01 00:00:00', '2018-02-01 00:00:00', 12, '2019-02-01 00:00:00', 'Readiness', 'FI/TNA/other', '250000.00', 'under implementation'),

('MNG-RS-004', 'Mongolia', 'Asia Pacific Office', 'Building capacity to advance National Adaptation Plan Process in Mongolia', 2895461, '2018-06-20 00:00:00', '2018-06-20 00:00:00', 36, '2021-06-19 00:00:00', 'National Adaptation Plans', 'NAP', '406123.00', 'under implementation'),

('MRT-RS-002', 'Mauritania', 'Africa Office', 'Building capacity to advance National Adaptation Plan Process in Mauritania', 2670374, '2018-07-17 00:00:00', '2018-07-17 00:00:00', 36, '2021-07-08 00:00:00', 'National Adaptation Plans', 'NAP', '742163.00', 'under implementation'),

('MUS-RS-002', 'Mauritius', 'CTCN', 'Climate Change Vulnerability and Adaptation Study for Port of Port Louis', 324764, '2018-01-22 00:00:00', '2018-01-22 00:00:00', 15, '2019-04-19 06:00:00', 'Readiness', 'FI/TNA/other', '324764.00', 'under implementation'),

('NER-RS-002', 'Niger', 'Ecosystems', 'Building Niger's engagement with the GCF: Establishment and strengthening of the NDA, and elaboration of a country programme identifying strategic priorities', 300000, '2018-06-20 00:00:00', '2018-06-20 00:00:00', 18, '2019-12-19 12:00:00', 'Readiness', 'Capacity Building', '138100.00', 'requesting funds'),

('NPL-RS-001', 'Nepal', 'Asia Pacific Office', 'Building Capacity to Advance National Adaptation Plan Process in Nepal', 2935350, '2017-05-15 00:00:00', '2017-05-15 00:00:00', 36, '2020-05-14 00:00:00', 'National Adaptation Plans', 'NAP', '465410.00', 'under implementation'),

('PAK-RS-003', 'Pakistan', 'Asia Pacific Office', 'Building capacity to advance National Adaptation Plan Process in Pakistan', 2969674, '2018-03-02 00:00:00', '2018-03-03 00:00:00', 36, '2021-03-04 00:00:00', 'National Adaptation Plans', 'NAP', '675420.00', 'under implementation'),

('PSE-RS-002', 'Palestine ', 'CTCN', 'Technology Road Map for the Implementation of Climate Action Plans in Palestine.', 254100, '2017-10-18 00:00:00', '2017-10-18 00:00:00', 12, '2018-10-18 00:00:00', 'Readiness', 'FI/TNA/other', '254100.00', 'under implementation'),

('S1-32GCL-000023', 'Jordan PPFA', 'Ecosystems', 'Jordan Integrated Landscape Management Initiative (JILMI)', 2886275, '2018-03-05 00:00:00', '2018-08-28 00:00:00', 12, '2019-12-28 00:00:00', 'Readiness', NULL, '278946.28', 'under implementation'),

('SRB-RS-001', 'Serbia', 'Europe Office', 'Developing the capacities of the Republic of Serbia for an effective engagement with the Green Climate Fund', 300000, '2018-01-12 00:00:00', '2018-01-12 00:00:00', 12, '2019-01-12 00:00:00', 'Readiness', 'Capacity Building', '130000.00', 'under implementation'),

('SSD-RS-001', 'South Sudan, Egypt', 'Policy & Programme Division', 'Republic of South Sudan Green Climate Fund's Readiness and Preparatory Support Project ', 300000, '2018-06-20 00:00:00', '2018-06-20 00:00:00', 18, '2019-12-19 12:00:00', 'Readiness', 'Capacity Building', '153178.00', 'under implementation'),

('SWZ-RS-002', 'Swaziland ', 'Ecosystems', 'Green Climate Fund Readiness Support for Swaziland', 299032, '2018-03-12 00:00:00', '2018-03-12 00:00:00', 24, '2020-03-13 00:00:00', 'Readiness', 'Capacity Building', '83046.00', 'under implementation'),

('SWZ-RS-003', 'Swaziland', 'Africa Office', 'Building capacity to advance National Adaptation Plan process in Swaziland ', 2796359, '2018-06-28 00:00:00', '2018-06-28 00:00:00', 36, '2021-06-27 00:00:00', 'National Adaptation Plans', 'NAP', '744662.00', 'under implementation'),

('TON-RS-002', 'Tonga, uganda, Tanzania, Kenya ', 'CTCN', 'To develop an energy efficiency master plan for the Kingdom of Tonga and East Africa', 200000, '2017-04-20 00:00:00', '2017-04-20 00:00:00', 6, '2017-10-09 12:00:00', 'Readiness', 'FI/TNA/other', '200000.00', 'under implementation'),

('ZWE-RS-001', 'Zimbabwe', 'Ecosystems', '1. Establishing and strengthening National Designated Authorities or Focal Points;\r\n2. Developing strategic frameworks for engagement with the GCF, including the preparation of country programmes', 300000, '2018-03-05 00:00:00', '2018-03-05 00:00:00', 24, '2020-03-04 00:00:00', 'Readiness', 'Capacity Building', '121354.00', 'under implementation'),

('ZWE-RS-002', 'Zimbabwe', 'Africa Office', 'Building capacity to advance National Adaptation Plan Process in Zimbabwe', 2993349, '2018-05-11 00:00:00', '2018-05-11 00:00:00', 36, '2021-05-13 00:00:00', 'National Adaptation Plans', 'NAP', '877525.00', 'under implementation');

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-- Indexes for dumped tables

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-- Indexes for table `2022_application_development_and_support_exam_data`

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ALTER TABLE `2022_application_development_and_support_exam_data`

```
ADD PRIMARY KEY (`Project_Ref`);  
COMMIT;
```

```
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;  
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;  
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

Answers to Question Four

1. Create an API that exposes the above projects as JSON. The API endpoints can work as explained below:
 - i. Navigating to a URL like *api/projects/all* will return all projects as JSON
Answer: I have created api using Laravel and I can expose data using URL below:
http://127.0.0.1:8000/api/projects/all
 - ii. Navigating to a URL like *api/projects/country/Kenya* will return all projects from country Kenya as JSON
Answer: Use URL below to expose data: **http://127.0.0.1:8000/api/projects/Country/Kenya**
 - iii. Navigating to a URL like *api/projects/status/completed* will return all projects with status completed as JSON
Answer: Use URL below to expose data:
http://127.0.0.1:8000/api/projects/Status/completed