Visvesvaraya Technological University

Belagavi. Karnataka-590 018

A

PROJECT REPORT

ON

"COVID TRACKER"

Submitted in partial fulfillment of the requirements for the ***DBMS Laboratory with Mini Project*** **(18CSL57)** *course of the 5th semester*

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

Submitted by,

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Department of Computer Science and Engineering

2020 - 2021

JSS MAHAVIDYAPEETHA, MYSURU

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Department of Computer Science and Engineering

CERTIFICATE

This is to certify that the project work entitled **"COVID TRACKER "** is a bonafied work carried out by **ADITYA RASTOGI (1JS18CS008) , AMIT (1JS18CS015) and ANKIT KUMAR (1JS18CS018)** in partial fulfillment for the DBMS Laboratory with Mini Project **(18CSL57)** of 5th semester **Bachelor of Engineering** in **Computer Science and Engineering** of the **Visvesvaraya Technological University, Belgaum** during the academic year 2020 - 2021 . It is certified that all corrections and suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

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Name of the Examiners	**Signature with Date**
1)……	**……**
2)……	**……**

ABSTRACT

Along with the Coronavirus pandemic, another crisis has manifested itself in the form of mass fear and panic phenomena, fueled by incomplete and often inaccurate information. There is therefore a tremendous need to address and better understand COVID-19's informational crisis and gauge public sentiment, so that appropriate messaging and policy decisions can be implemented, using descriptive textual analytics supported by necessary textual data visualizations.

Given that data on the immediate effects of the COVID-19 crisis and the subsequent lockdown in many economies are not available, we resort to a qualitative research design in this project.

In this mini project, we will implement a live dashboard for COVID 19 spread analysis. This dashboard will provide many insightful visualizations for the study of coronavirus spread. In this project, we will work on different datasets around the world and generate different dashboards.

ACKNOWLEDGEMENTS

We express my humble pranamas to His Holiness **Jagadguru Sri Sri Sri Shivarathri Deshikendra Mahaswamiji** who has showered their blessings on us for framing our career successfully.

The completion of any project involves the efforts of many people. We have been lucky enough to have received a lot of help and support from all quarters during the making of this project, so with gratitude, we take this opportunity to acknowledge all those whose guidance and encouragement helped us emerge successful.

We are thankful to the resourceful guidance, timely assistance and graceful gesture of our guide Mr. Rohithaksha K , Faculty in-charge , Department of Computer Science and Engineering, who has helped us in every aspect of our project work.

We are also indebted to Dr. N.C.Naveen, Head of Department of Computer Science and Engineering for the facilities and support extended towards us.

We express our sincere thanks to our beloved principal**, Dr. Mrityunjaya V Latte** for having supported us in our academic endeavors.

And last but not the least, we would be very pleased to express our heart full thanks to all the teaching and non-teaching staff of CSE department and our friends who have rendered their help, motivation and support.

ADITYA RASTOGI

AMIT

ANKIT KUMAR

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Chapter 1

Preamble

1.1 Introduction

A database is an organized collection of data. A relational database, more restrictively, is a collection of schemas, tables, queries, reports, views, and other elements. A database management system (DBMS) is a computer-software application that interacts with end-users, other applications, and the database itself to capture and analyze data. A general-purpose DBMS allows the definition, creation, querying, update, and administration of databases [2]. There is a need for an application to make it easy for industries and trading companies to maintain their stock and have a monitored inventory. This makes it easy for them to avoid complete depletion of stock or over-stocking which can lead to a block in money and capital.

Covid Tracker can be use to know about the latest cases all over the world.

1.1.1 Database Management System (DBMS)

Following the technology progress in the areas of processors, computer memory, computer storage, and computer networks, the sizes, capabilities, and performance of databases and their respective DBMSs have grown in orders of magnitude. The development of database technology can be divided into three eras based on data model or structure: navigational, SQL/relational, and post-relational. The two main early navigational data models were the hierarchical model, epitomized by IBM's IMS system, and the CODASYL model (network model), implemented in a number of products such as IDMS [2].

The relational model employs sets of ledger-style tables, each used for a different type of entity. Only in the mid-1980s did computing hardware become powerful enough to allow the wide deployment of relational systems (DBMSs plus applications). By the early 1990s, however, relational systems dominated in all large-scale data processing applications, and as of 2015 they remain dominant: IBM DB2, Oracle, MySQL, and Microsoft SQL Server are the top DBMS. The dominant

database language, standardized SQL for the relational model, has influenced database languages for other data models [3].

1.1.2 HTML

Hypertext Markup Language (**HTML**) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.[4]

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by *tags*, written using angle brackets. Tags such as `<img />` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

1.1.3 phpMyadmin

phpMyAdmin is a free and open source administration tool for MySQL and MariaDB. As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting services.[3]

Features provided by the program include:[9]

1. Web interface
2. MySQL and MariaDB database management
3. Import data from CSV and SQL
4. Export data to various formats: CSV, SQL, XML, PDF (via the TCPDF library), ISO/IEC 26300 - OpenDocument Text and Spreadsheet, Word, Excel, LaTeX and others
5. Administering multiple servers
6. Creating PDF graphics of the database layout
7. Creating complex queries using query-by-example (QBE)
8. Searching globally in a database or a subset of it
9. Transforming stored data into any format using a set of predefined functions, like displaying BLOB-data as image or download-link
10. Live charts to monitor MySQL server activity like connections, processes, CPU/memory usage, etc.
11. Working with different operating systems.[10]
12. Make complex SQL queries easier.

1.1.2(b) CSS

Cascading Style Sheets (**CSS**) is a style sheet language used for describing the presentation of a document written in a markup language like HTML.[1] CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.[2]

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.[3] This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.[4]

The name *cascading* comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) `text/css` is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.[5]

In addition to HTML, other markup languages support the use of CSS including XHTML, plain XML, SVG, and XUL.

1.1.4 Normalization

Normalization is a process of organizing the data in database to avoid data redundancy, insertion anomaly, update anomaly & deletion anomaly. To overcome these anomalies we need to normalize the data. There are 4 basic types of normalizations. They are:

- First normal form(1NF)
- Second normal form(2NF)
- Third normal form(3NF)
- Boyce & Codd normal form (BCNF)

First normal form (1NF) is defined as per rule as: an attribute (column) of a table cannot hold multiple values. It should hold only atomic values. This means that there shouldn't be repetition of data in the tables .

A table is said to be in 2NF if the two conditions stated are satisfied. The table is in First normal form and all the non-prime attribute are dependent on the proper subset

of any candidate key of table. The attribute that is not part of any candidate key are known as non-prime attribute .

A table design is said to be in 3NF if the table is in 2NF and Transitive functional dependency of non-prime attribute on any super key are removed.

Boyce Codd normal form (BCNF) is the advance version of 3NF that's why it is also referred as 3.5NF. BCNF is stricter than 3NF. A table complies with BCNF if it is in 3NF and for every functional dependency X->Y, X should be the super key of the table.

1.2 Objectives

You can use the COVID tracker check-in function to:

1. Advice user on what to do to protect themselves.
2.User can track if they show symptoms of infection.
3.It hopes to create a map showing where outbreaks are happening and help distinguish cases from those of the common cold.
4.It will give updates on COVID-19 also you can see latest facts and figures about the virus

1.3 Organization of the Report

Chapter 1 provides the information about the basics of phpMyAdmin and html. In Chapter 2, we discuss the software and hardware requirements to run the above applications. Chapter 3 gives the idea of the project and its actual implementation. Chapter 4 discusses about the results and discussions of the program. Chapter 5 concludes by giving the direction for future enhancement.

1.4 Summary

The chapter discussed before is an overview about the html Application and phpMyAdmin DBMS. The scope of study and objectives of the project are mentioned clearly. The organization of the report is been pictured to increase the readability. Further, coming up chapters depicts the use of various queries to

implement various changes like insert, update, delete and also triggers to perform various functions.

Chapter 2

Requirement Specifications

2.1 SOFTWARE SPECIFICATION

- Operating System: Windows Vista/7/8/10
- Front End: JAVASCRIPT, HTML AND CSS
- Rear End: MySQL & PHP

2.2 HARDWARE SPECIFICATION

- Processor: x86 compatible processor with 1.7 GHz Clock Speed
- RAM: 512 MB or greater
- Hard Disk: 20 GB or grater
- Monitor: VGA/SVGA
- Keyboard: 104 keys standard
- Mouse: 2/3 button. Optical/Mechanical.

2.3 USER CHARACTERISTICS

Every user:

- Should be comfortable with basic working of the computer
- Must have basic knowledge of English
- Must carry a login ID and password used for authentication

Chapter 3

System Design and Implementation

3.1 Introduction

Systems design is the process or art of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. One could see it as the application of systems theory to product development.

This Project is implemented using JAVASCRIPT, which is proven to be a very efficient tool in the field of Java programming. It is done under Windows10 platform. JQuery library is used to create the objects and to translate them. PHP programming language is used to implement the entire code. Interface to the program is provided with the help of MySQL Database.

3.2 ER Diagram

An entity–relationship model or the ER Diagram describes inter-related things of interest in a specific domain of knowledge. An ER model is composed of entity types and specifies relationships that can exist between instances of those entity types.

In software engineering an ER model is commonly formed to represent things that a business needs to remember in order to perform business processes. Consequently, the ER model becomes an abstract data model that defines a data or information structure that can be implemented in a database, typically a relational database.

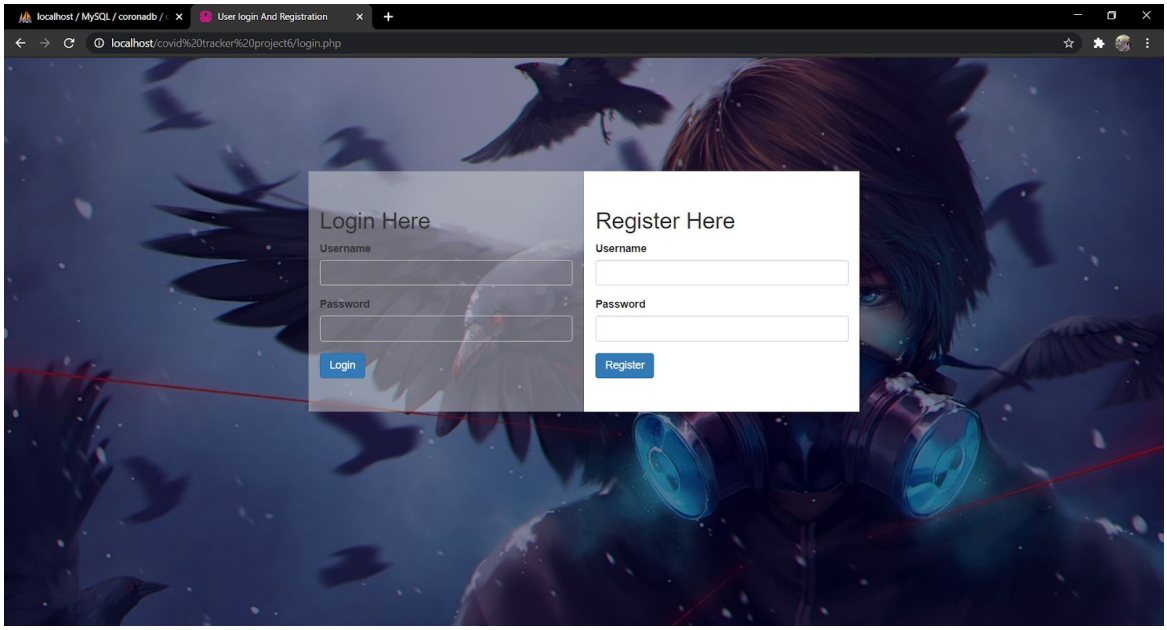
3.3 Schema Diagram

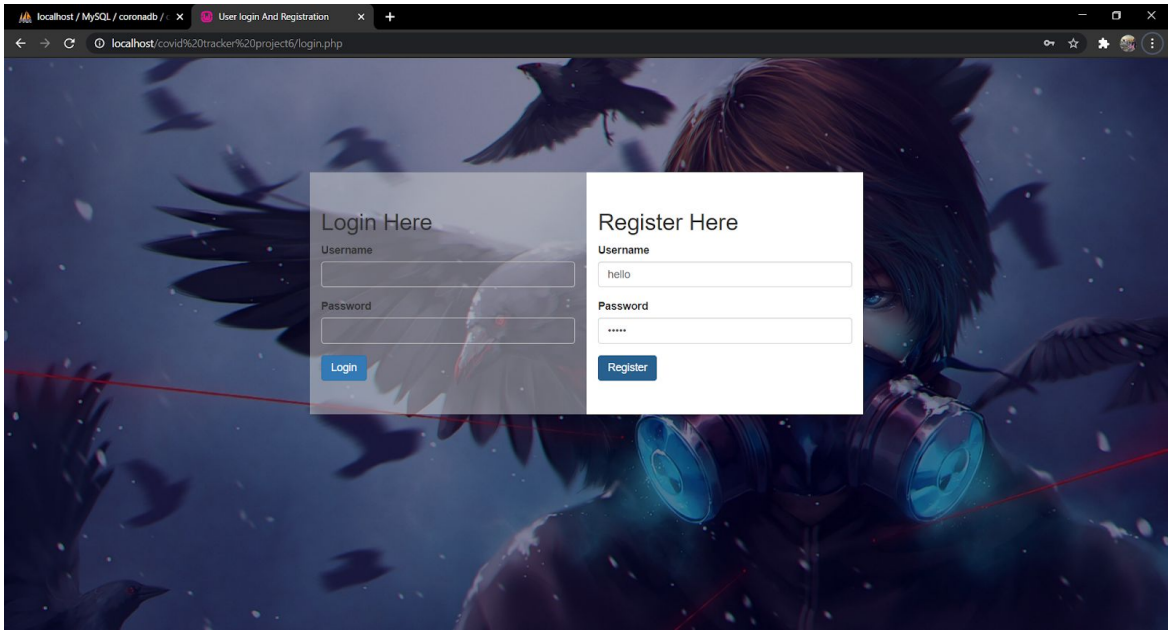
The schema diagram of a database system is its structure described in a formal language supported by the database management system (DBMS). The formal definition of a database schema is a set of formulas called integrity constraints imposed on a database.
The term "schema" refers to the organization of data as a blueprint of how the database is constructed.

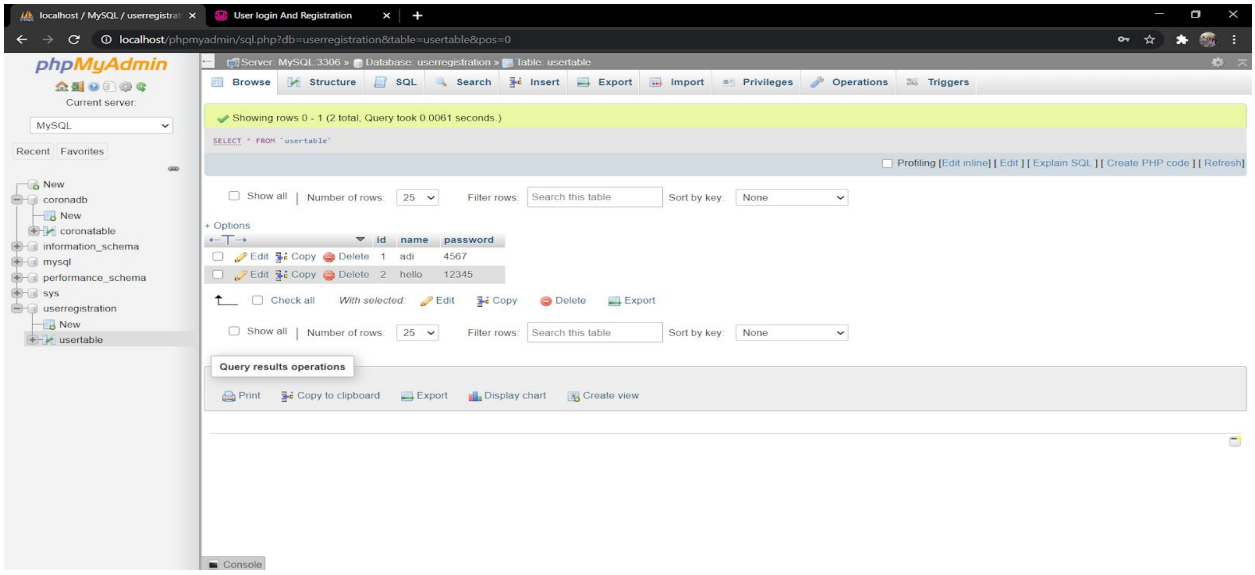
Chapter 4 : Results and Discussions

The project is compiled and executed on phpMyadmin. We have put in few screenshots in here to show the working of our Application.

Snapshots:






localhost / MySQL / userregistrat
User login And Registration
localhost/phpmyadmin/sql.php?db=userregistration&table=usertable&pos=0
phpMyAdmin
Current server:
MySQL
Recent
Favorites
New
coronadb
New
coronatable
information_schema
mysql
performance_schema
sys
userregistration
New
usertable
Server: MySQL:3306 » Database: userregistration » Table: usertable
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Triggers
Showing rows 0 - 1 (2 total, Query took 0.0061 seconds.)
SELECT * FROM `usertable`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows:
25
Filter rows:
Search this table
Sort by key:
None
+ Options
id
name
password
Edit
Copy
Delete
1
adi
4567
Edit
Copy
Delete
2
hello
12345
Check all
With selected:
Edit
Copy
Delete
Export
Show all
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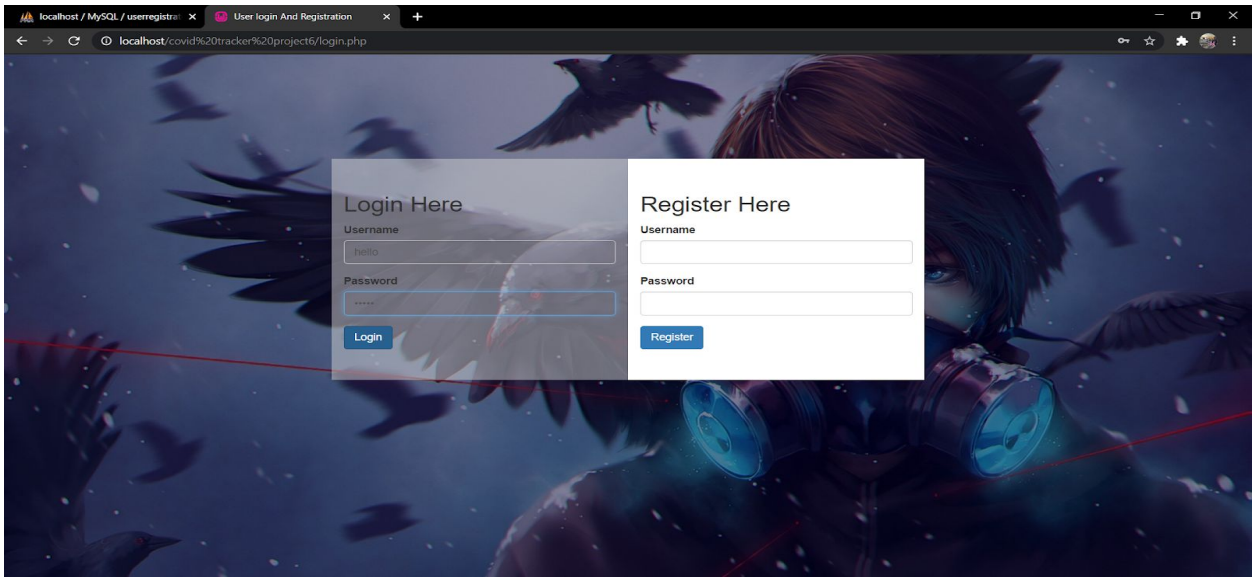
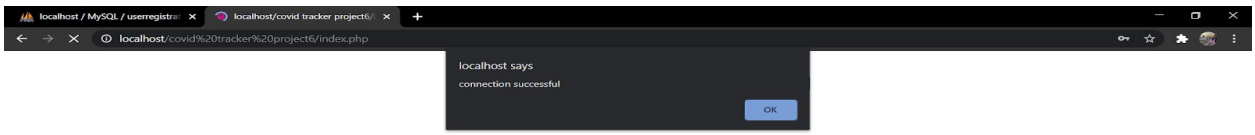
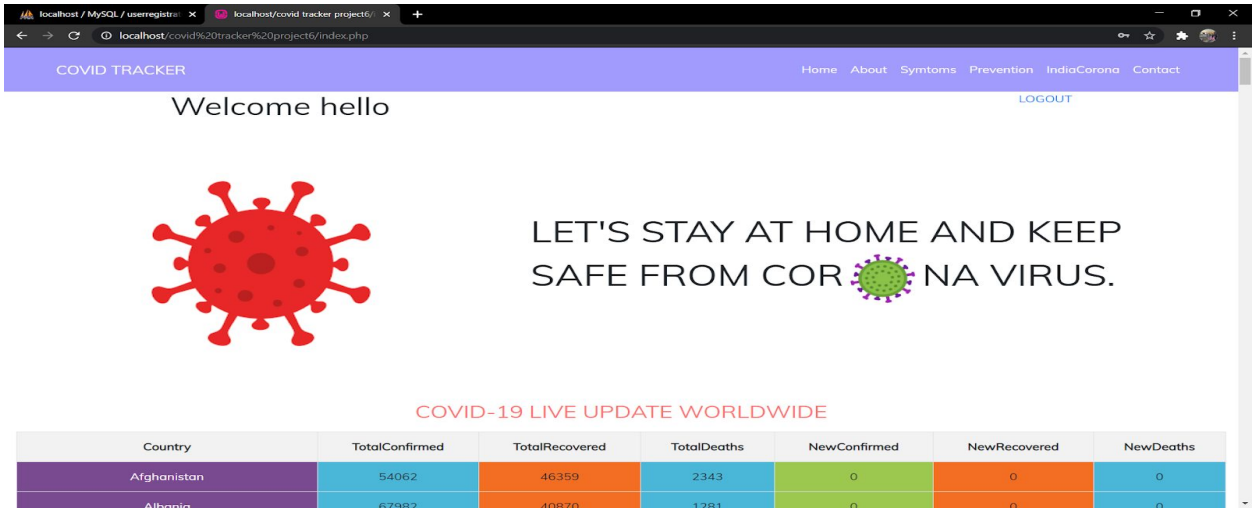
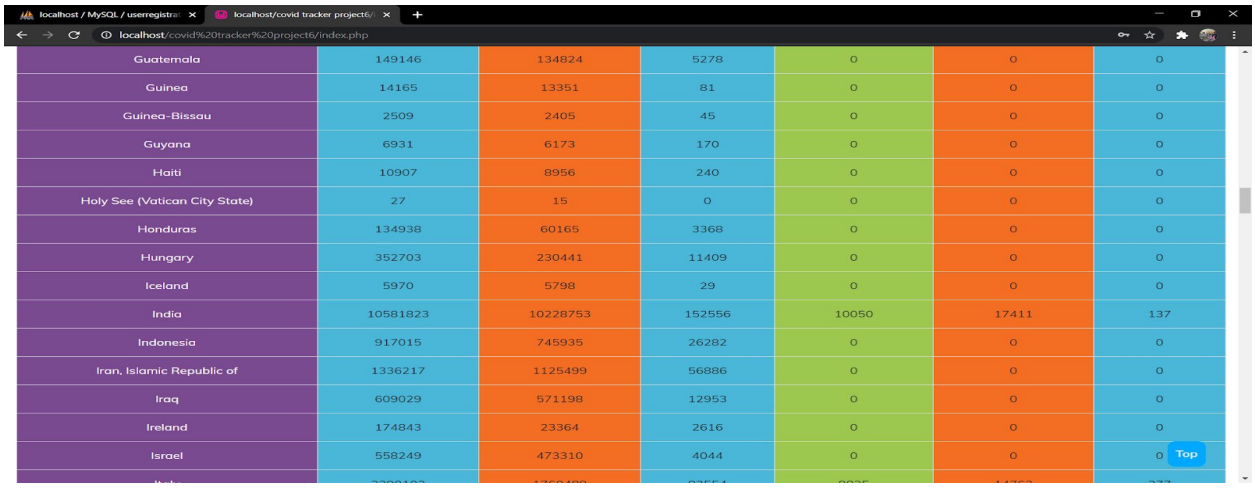
Filter rows:
Search this table
Sort by key:
None
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Console


localhost / MySQL / userregistrat
User login And Registration
localhost/covid%20tracker%20project6/login.php
Login Here
Username
hello
Password
Login
Register Here
Username
Password
Register


localhost / MySQL / userregistrat
localhost/covid tracker project6/
localhost/covid%20tracker%20project6/index.php
localhost says
connection successful
OK


localhost / MySQL / userregistrat
localhost/covid tracker project6/
localhost/covid%20tracker%20project6/index.php
COVID TRACKER
Home About Symtoms Prevention IndiaCorona Contact
LOGOUT
Welcome hello
LET'S STAY AT HOME AND KEEP SAFE FROM COR NA VIRUS.
COVID-19 LIVE UPDATE WORLDWIDE
Country TotalConfirmed TotalRecovered TotalDeaths NewConfirmed NewRecovered NewDeaths
Afghanistan 54062 46359 2343 0 0 0


localhost / MySQL / userregistrat
localhost/covid tracker project6/
localhost/covid%20tracker%20project6/index.php
Guatemala 149146 134824 5278 0 0 0
Guinea 14165 13351 81 0 0 0
Guinea-Bissau 2509 2405 45 0 0 0
Guyana 6931 6173 170 0 0 0
Haiti 10907 8956 240 0 0 0
Holy See (Vatican City State) 27 15 0 0 0 0
Honduras 134938 60165 3368 0 0 0
Hungary 352703 230441 11409 0 0 0
Iceland 5970 5798 29 0 0 0
India 10581823 10228753 152556 10050 17411 137
Indonesia 917015 745935 26282 0 0 0
Iran, Islamic Republic of 1336217 1125499 56886 0 0 0
Iraq 609029 571198 12953 0 0 0
Ireland 174843 23364 2616 0 0 0
Israel 558249 473310 4044 0 0 0
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localhost / MySQL / userregistrat
localhost/covid tracker project6/
localhost/covid%20tracker%20project6/index.php#aboutid
ABOUT COVID-19
S-Protein
HE-Protein
3'-poly A
5'-Cap A
RNA
N-Protein
Nucleocapsid
M-Protein
Envelope
WHAT IS CORONA
Coronavirus disease (COVID-19) is an infectious disease caused by a new virus. The disease causes respiratory illness (like the flu) with symptoms such as a cough, fever, and in more severe cases, difficulty breathing. You can protect yourself by washing your hands frequently, avoiding touching your face, and avoiding close contact (1 meter or 3 feet) with people who are unwell.
HOW IT SPREADS: Coronavirus disease spreads primarily through contact with an infected person when they cough or sneeze. It also spreads when a person touches a surface or object that has the virus on it, then touches their eyes, nose, or mouth.
CORONAVIRUS SYMPTOMS
Top

localhost / MySQL / userregistra | localhost/covid tracker project6/ | localhost/covid%20tracker%20project6/index.php#sympid

CORONAVIRUS SYMPTOMS


COUGH


RUNNY NOSE


COLD


FEVER


TIREDNESS


DIFFICULTY BREATHING

Top

6 STEPS PREVENTION AGAINST CORONAVIRUS

localhost / MySQL / userregistra | localhost/covid tracker project6/ | localhost/covid%20tracker%20project6/index.php#preventid

6 STEPS PREVENTION AGAINST CORONAVIRUS


wash your hands regularly for 20 seconds ,with soap and water or alcohol-based hand rub. To see how to wash hand click here


cover your nose and mouth with a disposal tissue or flexed elbow when you cough or sneeze.How to cover your face click here


avoid close contact (1 meter or 3 feet) with people who are unwell.To know what is social distancing click here


stay home and self-isolate from others in the household if you feel unwell.To know what is home quarantine is click here


stay informed by wathing news & follow the recommended practise To get the news click here


if you have fever ,cough and difficulty breathing ,seek medicine care early Call the helpline number 1075

CONTACT WITH US

Top

localhost / MySQL / userregistra | localhost/covid tracker project6/ | localhost/covid%20tracker%20project6/index.php#contactid

CONTACT WITH US

username

name

Email

name@gmail.com

mobile

mobile

select symptoms

Cold Fever Difficulty In Breath Feeling Weak No Symp

Example textarea

Submit

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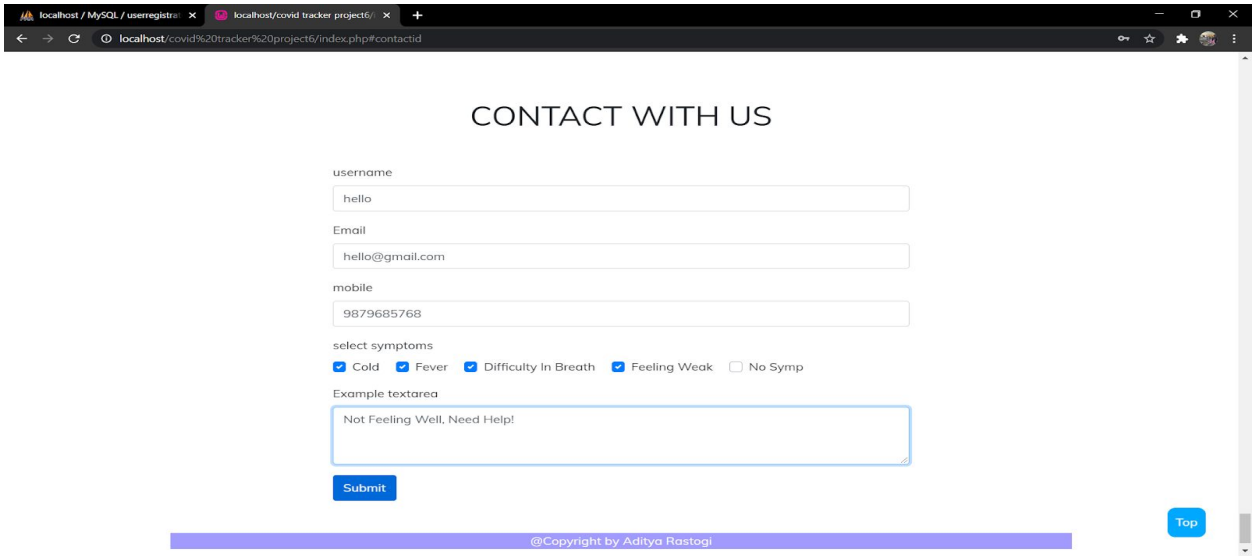
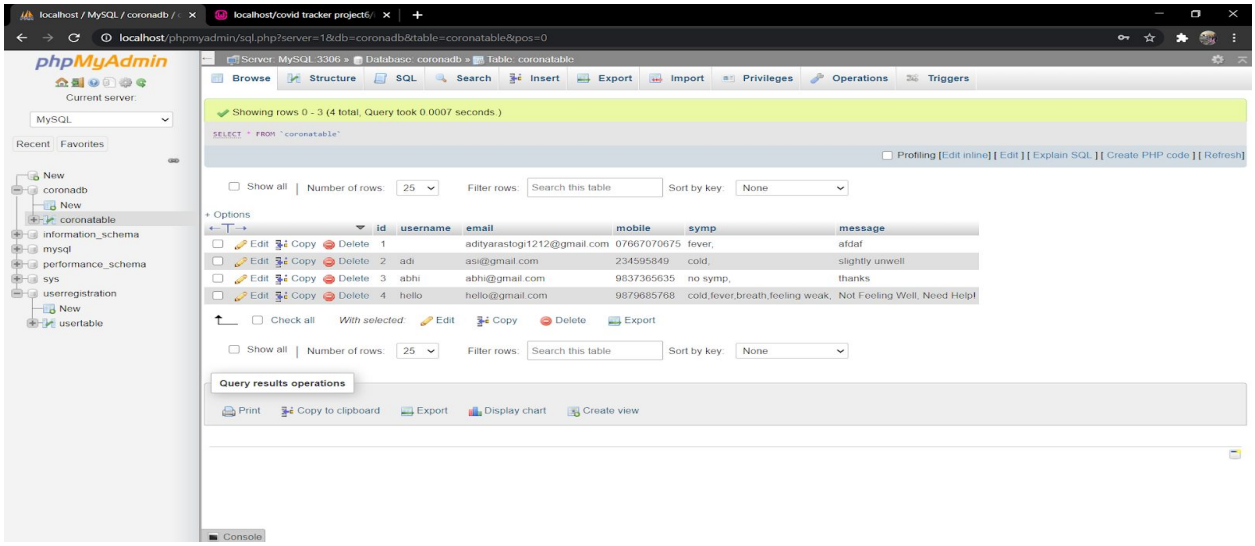
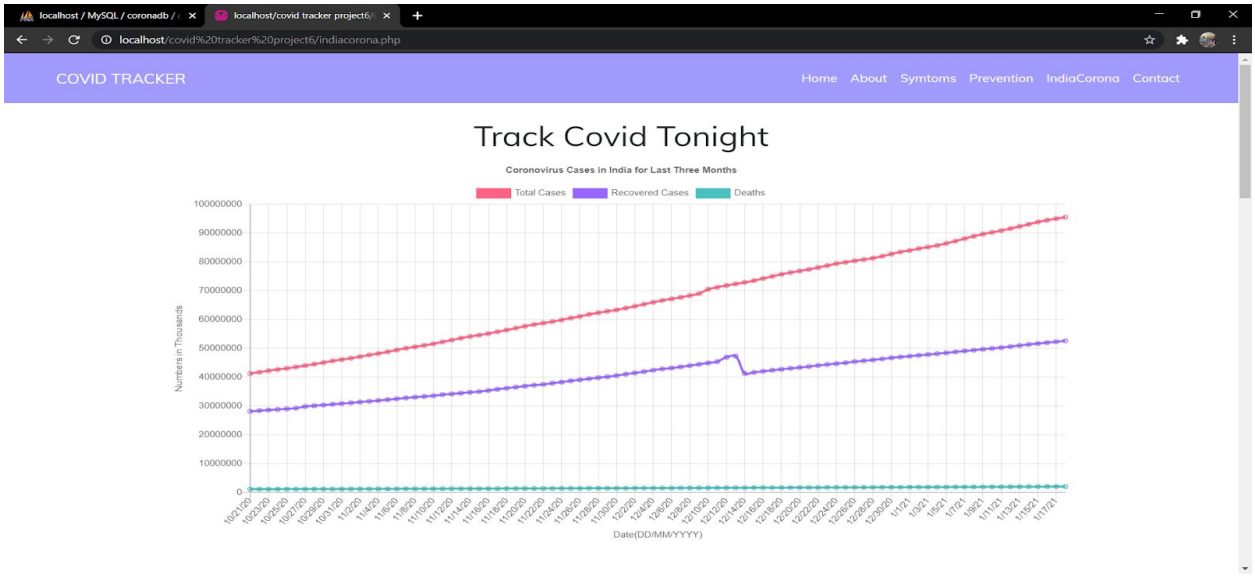
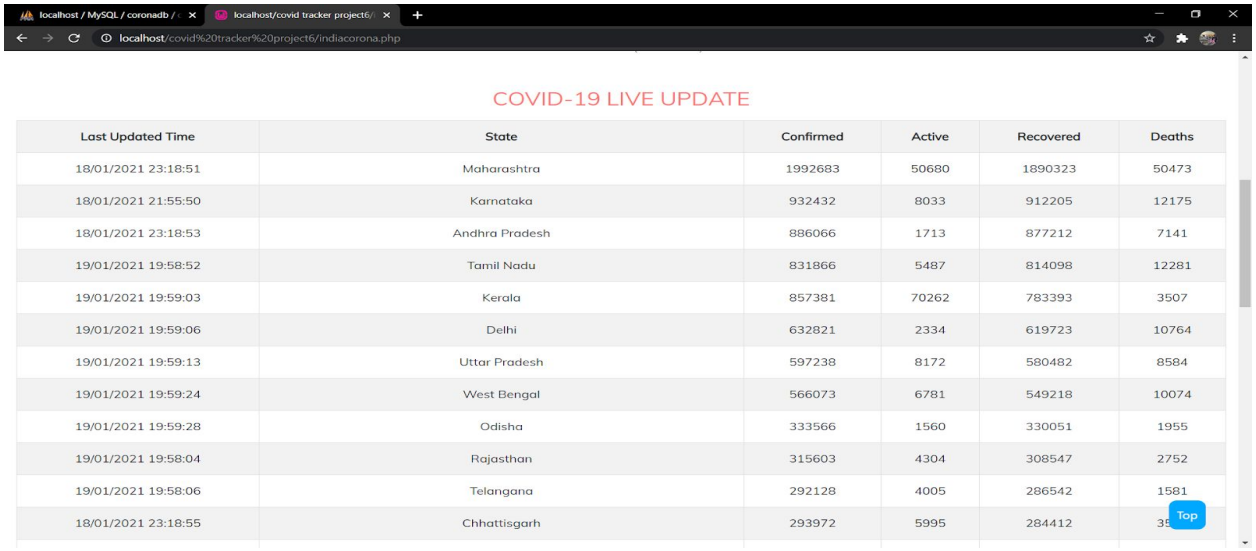
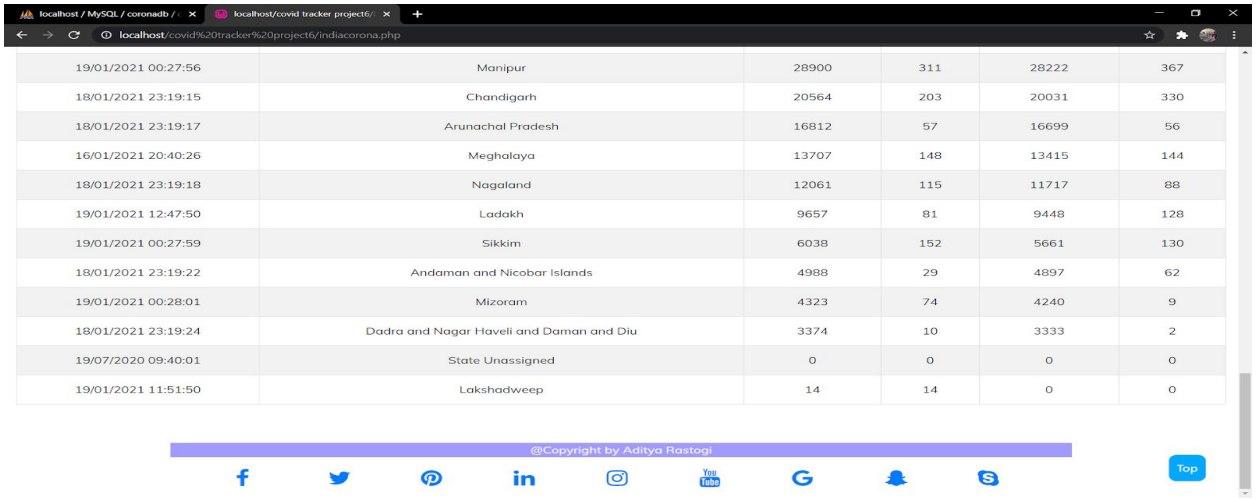
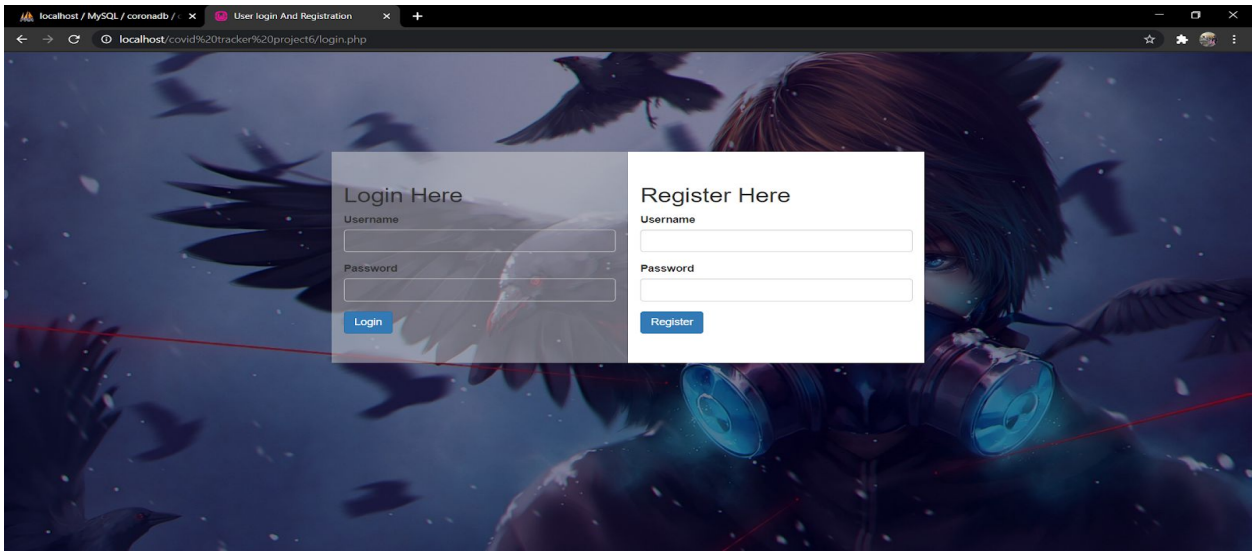

localhost / MySQL / userregistra
localhost/covid tracker project6/
localhost/covid%20tracker%20project6/index.php#contactid
CONTACT WITH US
username
hello
Email
hello@gmail.com
mobile
9879685768
select symptoms
Cold
Fever
Difficulty In Breath
Feeling Weak
No Symp
Example textarea
Not Feeling Well, Need Help!
Submit
Top
@Copyright by Aditya Rastogi


localhost / MySQL / coronadb /
localhost/covid tracker project6/
localhost/phpmyadmin/sql.php?server=1&db=coronadb&table=coronatable&pos=0
phpMyAdmin
Current server:
MySQL
Recent
Favorites
New
coronadb
New
coronatable
information_schema
mysql
performance_schema
sys
userregistration
New
usertable
Server: MySQL:3306 » Database: coronadb » Table: coronatable
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Triggers
Showing rows 0 - 3 (4 total, Query took 0.0007 seconds.)
SELECT * FROM `coronatable`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
id username email mobile symp message
Edit Copy Delete 1 adityarastogi1212@gmail.com 07667070675 fever, afdaf
Edit Copy Delete 2 adi asi@gmail.com 234595849 cold, slightly unwell
Edit Copy Delete 3 abhi abhi@gmail.com 9837365635 no symp, thanks
Edit Copy Delete 4 hello hello@gmail.com 9879685768 cold,fever,breath,feeling weak, Not Feeling Well, Need Help!
Check all
With selected:
Edit
Copy
Delete
Export
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Console

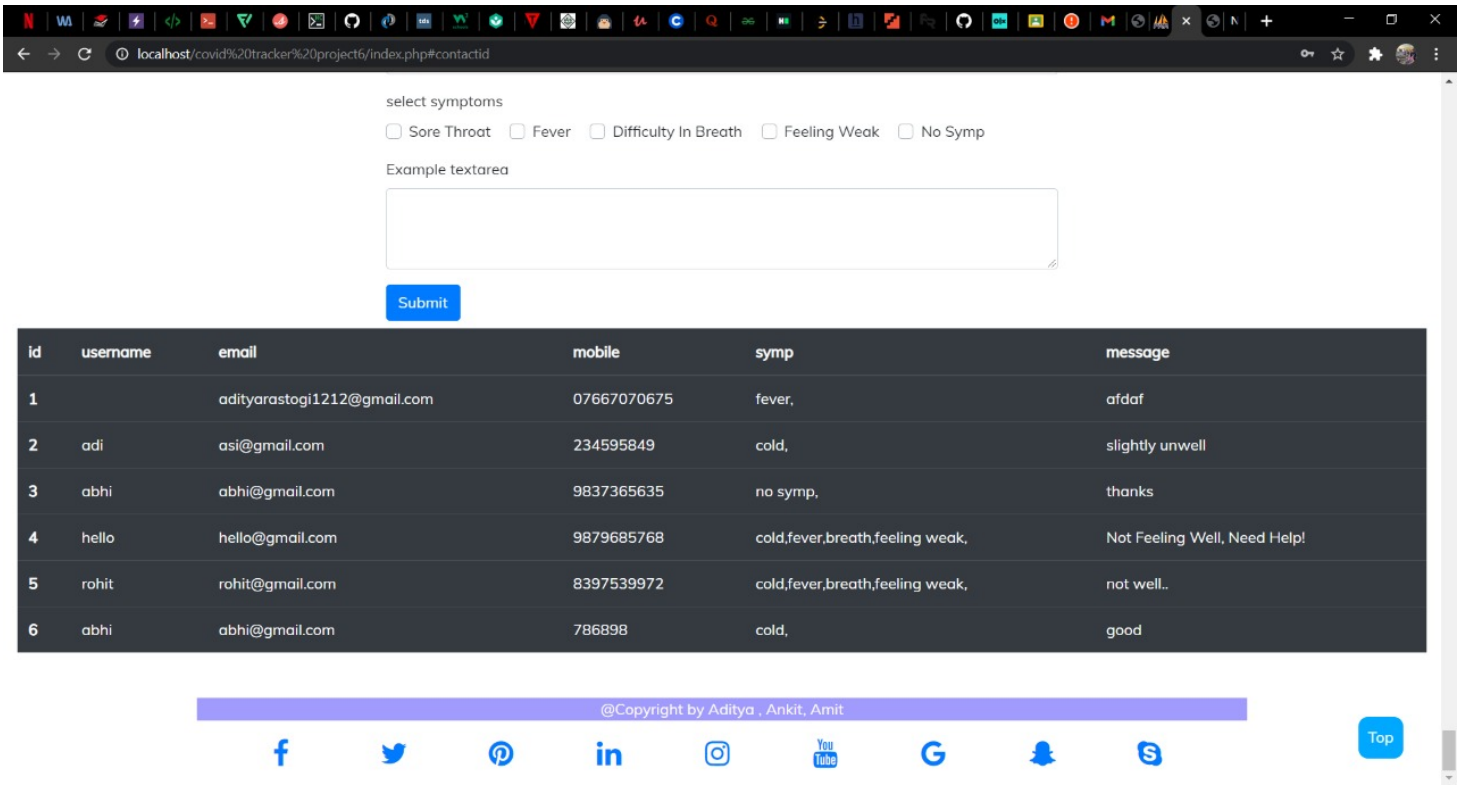

localhost / MySQL / coronadb /
localhost/covid tracker project6/
localhost/covid%20tracker%20project6/indiacorona.php
COVID TRACKER
Home
About
Symtoms
Prevention
IndiaCorona
Contact
Track Covid Tonight
Coronovirus Cases in India for Last Three Months
Total Cases
Recovered Cases
Deaths
Numbers in Thousands
Date(DD/MM/YYYY)







And after pressing on logout button, we again come back to login-register page.



id	username	email	mobile	symp	message
1		adityarastogi1212@gmail.com	07667070675	fever,	afdaf
2	adi	asi@gmail.com	234595849	cold,	slightly unwell
3	abhi	abhi@gmail.com	9837365635	no symp,	thanks
4	hello	hello@gmail.com	9879685768	cold,fever,breath,feeling weak,	Not Feeling Well, Need Help!
5	rohit	rohit@gmail.com	8397539972	cold,fever,breath,feeling weak,	not well..
6	abhi	abhi@gmail.com	786898	cold,	good

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Conclusion and Future Enhancements

5.1 Conclusions

Along with the Coronavirus pandemic, another crisis has manifested itself in the form of mass fear and panic phenomena, fueled by incomplete and often inaccurate information. There is therefore a tremendous need to address and better understand COVID-19's informational crisis and gauge public sentiment, so that appropriate messaging and policy decisions can be implemented, using descriptive textual analytics supported by necessary textual data visualizations.
Given that data on the immediate effects of the COVID-19 crisis and the subsequent lockdown in many economies are not available, we resort to a qualitative research design in this project.

5.2 Future Enhancements

The future scope of our project is vast and can be used in extensive ways:

As discussed the limitation of this system, we can implement this as client/server system. So all the data will be stored in the single machine, and for any purpose all the data will be retrieved from this central database. So there will be no human work require for the employee. There will be only one person required who will maintain this central database