GOVERNMENT OF INDIA

MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP

DIRECTORATE GENERAL OF TRAINING

NATIONAL SKILL TRAINING INSTITUTE

NSTI Campus, Thiruvananthapuram.

PROJECT DOCUMENT

This is to certify that following trainees have completed their project titled

"EMPLOYEE REGISTRATION SYSTEM"

For IBM Program – IT, Networking and Cloud (Technical Diploma)

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ABSTRACT

The project title is Employee Registration System. It is a computer system that helps manage the information related to Employee who worked the shop and who are registered the form earlier. Proper data collection and management are absolutely essential for ensuring that your company avoids data breach issues and the resulting loss of employee trust. Furthermore, effective employee data management is beneficial for your business period.

CONTENTS

1. INTRODUCTION

1.1Objective/ Project Overview

The main objective of this project to give the information about Employee who worked the shop and register the form. The Employee management have rights to register the portal and login through that email id and password.

1.2 Project Description

This project is about developing the website for Employee Registration System. Programming languages include JavaScript with Nodejs with express and Mysql are used for developing the website and deploy the app using cloud. The Company employees can register and login through that email id and password.

1.3 SCOPE OF WORK

Data is essentially the plain facts and statistics collected during the operations of a business. They can be used to measure/record a wide range of business activities - both internal and external. While the data itself may not be very informative, it is the basis for all reporting and as such is crucial in business. Employee Data Management system helps to give a brief idea about the Employees details. It is helps to the Company Management easily identify their employee details and employees can easily register and login through the email id and password. This website is to become a user-friendly and reliable for all users.

2. SOFTWARE DEVELOPMENT ENVIRONMENT

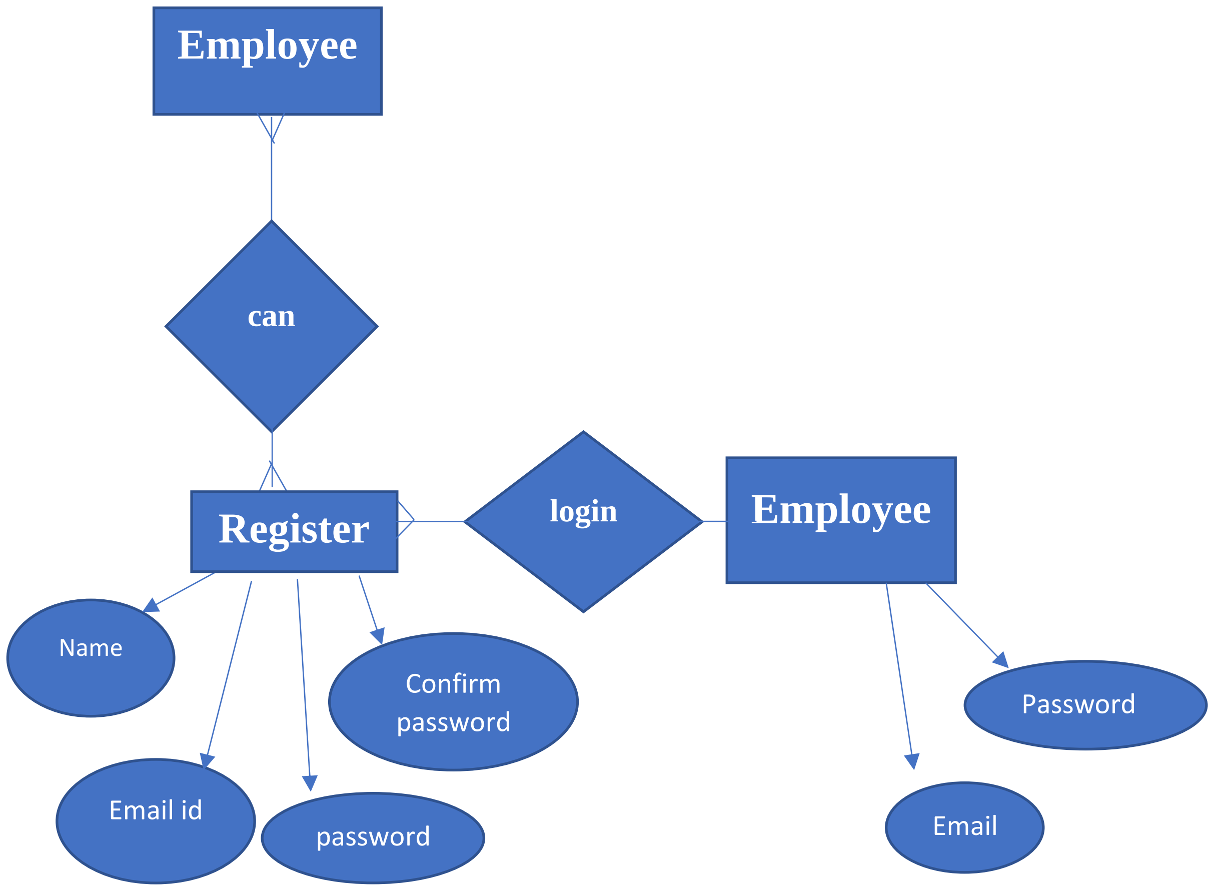
We using Nodejs with JavaScript and Mongo dB Database for developing us website. Node.js is an open-source server environment.Node.js allows you to run JavaScript on the server. Node.js is free. Node.js can generate dynamic page content. Node.js can create, open, read, write, delete, and close files on the server. Node.js can collect form data. Node.js can add, delete, modify data in your database. Node. js is a runtime environment that allows software developers to launch both the frontend and backend of web apps using JavaScript. Although JS underpins all the processes for app assembly, as a backend development environment, Node.

MySQL is a relational database management system based on SQL – Structured Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications. The most common **use** for MySQL however, is for the purpose of a web database.

3. SYSTEM DESIGN

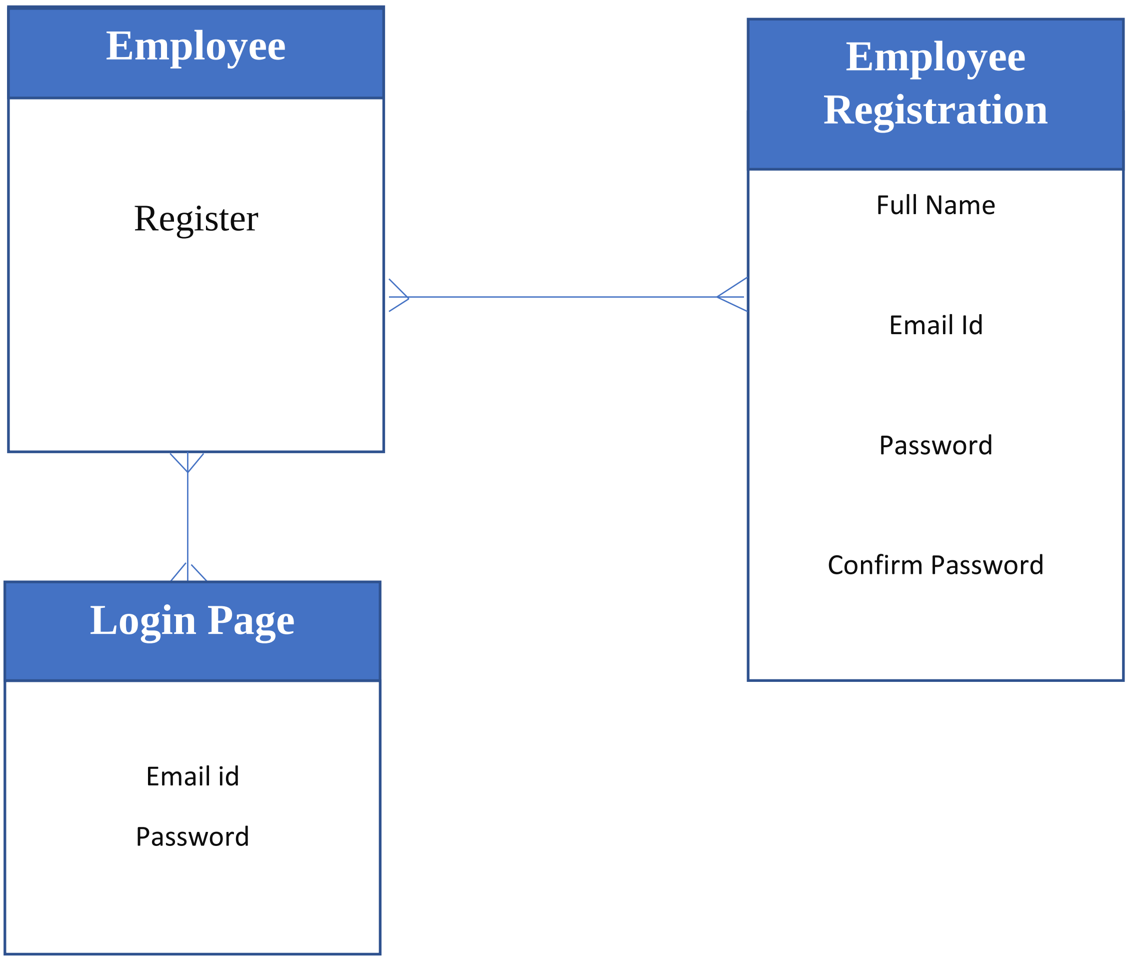
3.1 ER DIAGRAM

An Entity Relationship Diagram is a visual representation of different entities within a system and how they relate to each other



3.2 CLASS DIAGRAM

Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modeling of object-oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages.



4. SYSTEM REQUIREMENTS

4.1 SOFTWARE SPECIFICATION

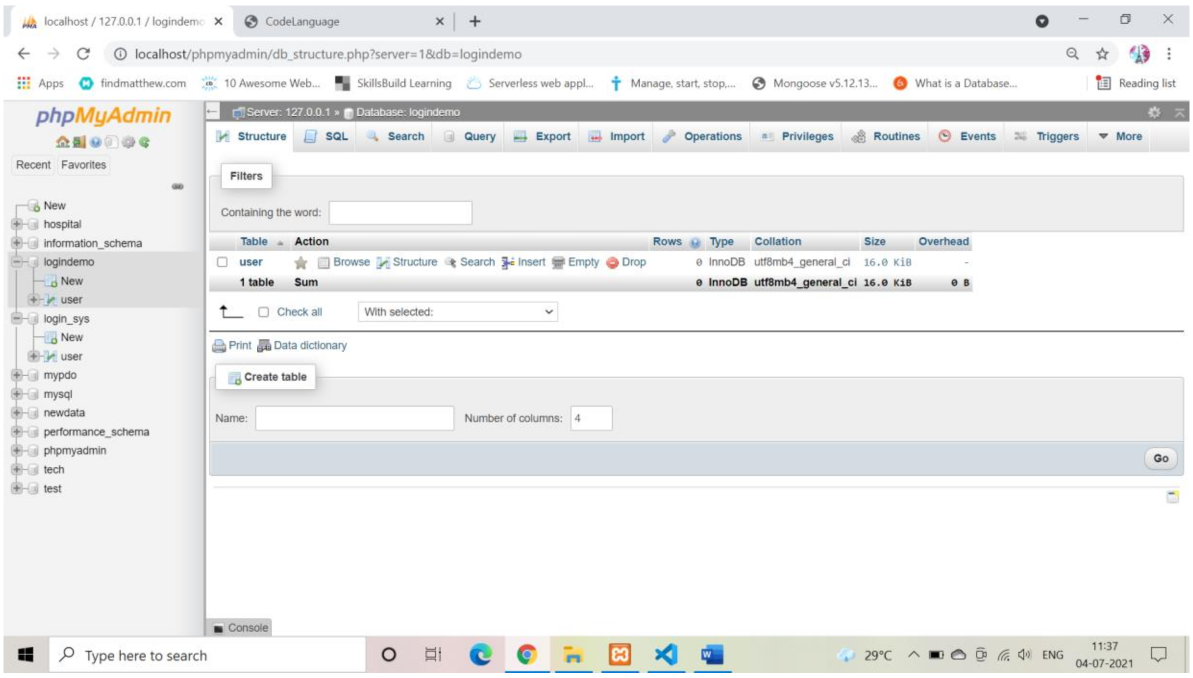
Operating System	:	Windows 7
Front End	:	JavaScript
Back End	:	Nodejs, Express, MySQL, Cloud
Code Editor	:	Visual Code
Server	:	Web Browser: Google Chrome

4.2 HARDWARE SPECIFICATION

RAM	:	1 GB or above
Processor	:	1 GHz or more
Hard Drive	:	32 GB or above
Network Connectivity	:	LAN or Wi-Fi

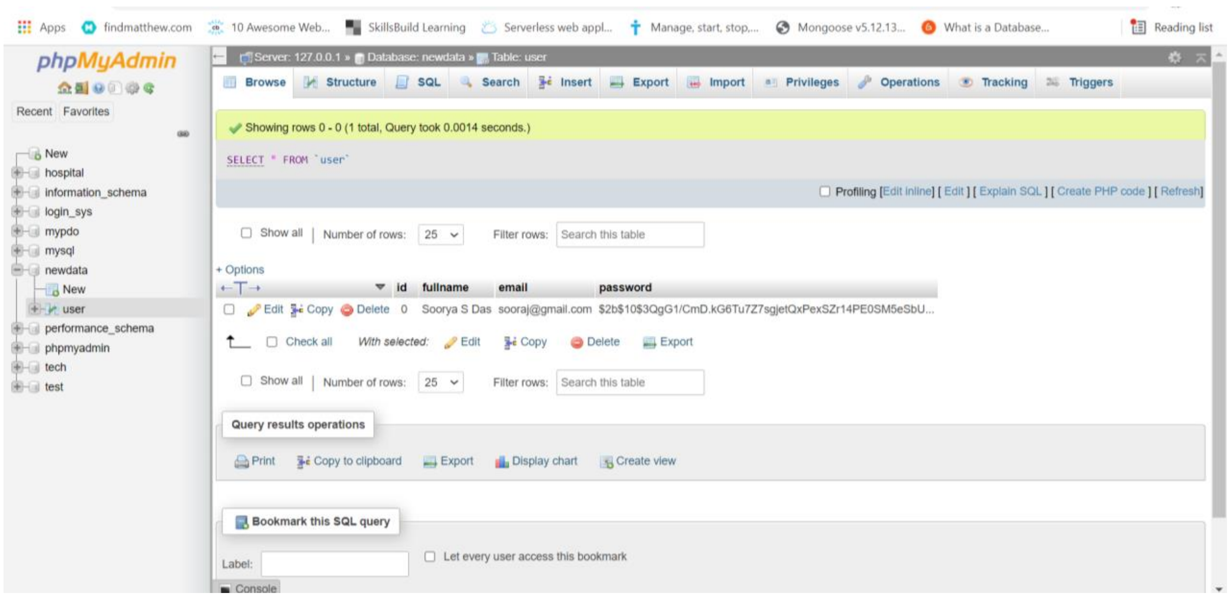
1. APPENDICES

5.1. DATABASE TABLES



Server: 127.0.0.1 » Database: logindemo

	Table	Action	Rows	Type	Collation	Size	Overhead
☐	user	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
	1 table	Sum	0	InnoDB	utf8mb4_general_ci	16.0 KiB	0 B



Server: 127.0.0.1 » Database: newdata » Table: user

Showing rows 0 - 0 (1 total, Query took 0.0014 seconds.)

```
SELECT * FROM `user`
```

	id	fullname	email	password
☐ Edit Copy Delete	0	Soorya S Das	sooraj@gmail.com	$2b$10$3QgG1/CmD.kG6Tu7Z7sgjetQxPexSZr14PE0SM5eSbU...

5.2. SOURCE CODE

1. Conn.js

```
var mysql = require('mysql');

var con = mysql.createConnection({

   host : 'localhost',
   user : 'root',
   password : '',
   database : 'newdata'
});

con.connect((err) => {
   if(err) throw err;
   console.log('Database Connected..');
});

module.exports = con;
```

2. Index.js

```
var express = require('express');
var router = express.Router();
 var mysql = require('mysql');
var bcrypt = require('bcrypt');
var con = require('../conn/conn');
```

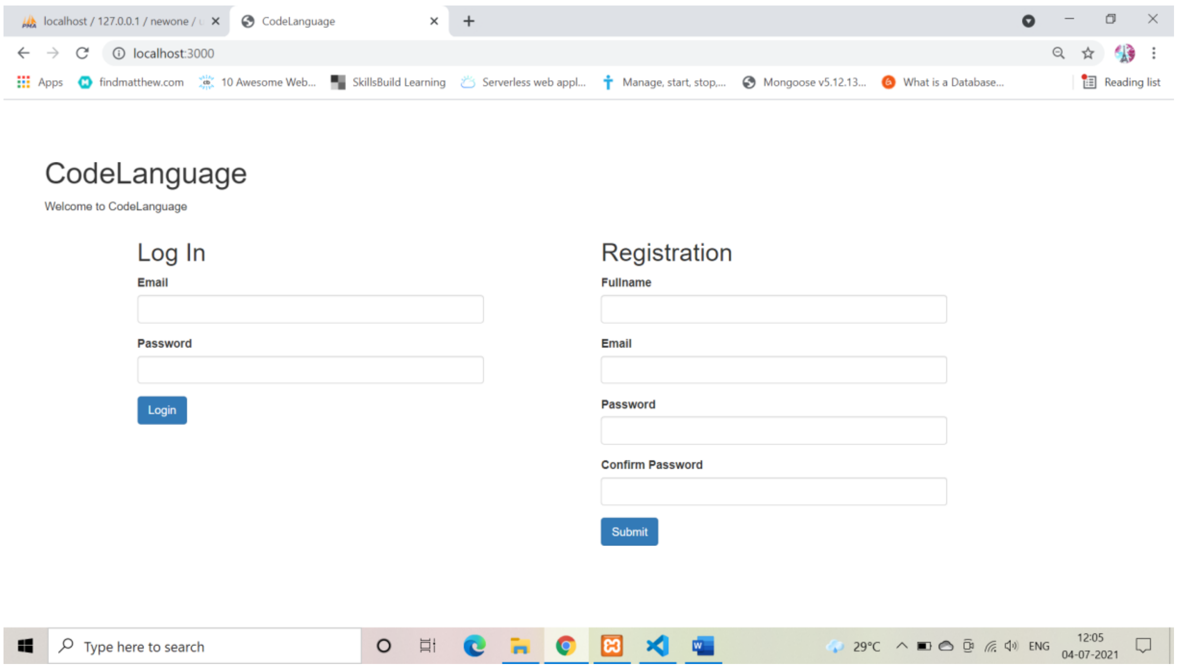
```
/* GET home page. */
router.get('/', function(req, res, next) {
  if(req.session.flag == 1){
    req.session.destroy();
    res.render('index', { title: 'CodeLanguage', message : 'Email Already Exists' , flag :
1});
  }
  else if(req.session.flag == 2){
    req.session.destroy();
    res.render('index', { title: 'CodeLanguage', message : 'Registration Done. Please
Login.', flag : 0});
  }
  else if(req.session.flag == 3){
    req.session.destroy();
    res.render('index', { title: 'CodeLanguage', message : 'Confirm Password Does Not
Match.', flag : 1});
  }
  else if(req.session.flag == 4){
    req.session.destroy();
    res.render('index', { title: 'CodeLanguage', message : 'Incorrect Email or Password.',
flag : 1 });
  }
  else{
    res.render('index', { title: 'CodeLanguage' });
  }

});

//Handle POST request for User Registration
router.post('/auth_reg', function(req, res, next){

  var fullname = req.body.fullname;
  var email = req.body.email;
  var password = req.body.password;
  var cpassword = req.body.cpassword;

  if(cpassword == password){

    var sql = 'select * from user where email = ?;';

    con.query(sql,[email], function(err, result, fields){
      if(err) throw err;

      if(result.length > 0){
        req.session.flag = 1;
        res.redirect('/');
      }else{
        var hashpassword = bcrypt.hashSync(password, 10);
        var sql = 'insert into user(fullname,email,password) values(?,?,?);';

        con.query(sql,[fullname,email, hashpassword], function(err, result, fields){
          if(err) throw err;
          req.session.flag = 2;
          res.redirect('/');
        });
      }
    });
  }else{
    req.session.flag = 3;
    res.redirect('/');
  }
});


//Handle POST request for User Login
router.post('/auth_login', function(req,res,next){

  var email = req.body.email;
  var password =req.body.password;

  var sql = 'select * from user where email = ?;';

  con.query(sql,[email], function(err,result, fields){
    if(err) throw err;

    if(result.length && bcrypt.compareSync(password, result[0].password)){
      req.session.email = email;
      res.redirect('/home');
    }else{
      req.session.flag = 4;
      res.redirect('/');
    }
  });
});


//Route For Home Page
router.get('/home', function(req, res, next){
  res.render('home', {message : 'Welcome, ' + req.session.email});
});

router.get('/logout', function(req, res, next){
  if(req.session.email){
    req.session.destroy();
    res.redirect('/');
  }
})

module.exports = router;
```

3. App.js

```
var createError = require('http-errors');

var express = require('express');

var path = require('path');

var cookieParser = require('cookie-parser');

var logger = require('morgan');

var indexRouter = require('./routes/index');

var usersRouter = require('./routes/users');

var con = require('./conn/conn');

var session = require('express-session');


var app = express();


app.use(session({

  secret : 'ABCDefg',

  resave : false,

  saveUninitialized : true

}));



// view engine setup

app.set('views', path.join(__dirname, 'views'));

app.set('view engine', 'pug');
app.use(logger('dev'));
app.use(express.json());
app.use(express.urlencoded({ extended: false }));
app.use(cookieParser());
app.use(express.static(path.join(__dirname, 'public')));

app.use('/', indexRouter);
app.use('/users', usersRouter);

// catch 404 and forward to error handler
app.use(function(req, res, next) {
  next(createError(404));
});

// error handler
app.use(function(err, req, res, next) {
  // set locals, only providing error in development
  res.locals.message = err.message;
  res.locals.error = req.app.get('env') === 'development' ? err : {};

  // render the error page
  res.status(err.status || 500);
  res.render('error');
});

//Create Server
app.listen(3000, () => {
  console.log('Listening on port 3000...');
});

module.exports = app;
```

5.3. SCREENSHOTS

1. Registration Page


localhost / 127.0.0.1 / newone / CodeLanguage

localhost:3000

Apps findmatthew.com 10 Awesome Web... SkillsBuild Learning Serverless web appl... Manage, start, stop,... Mongoose v5.12.13... What is a Database... Reading list

CodeLanguage

Welcome to CodeLanguage

Log In

Email

Password

Login

Registration

Fullname

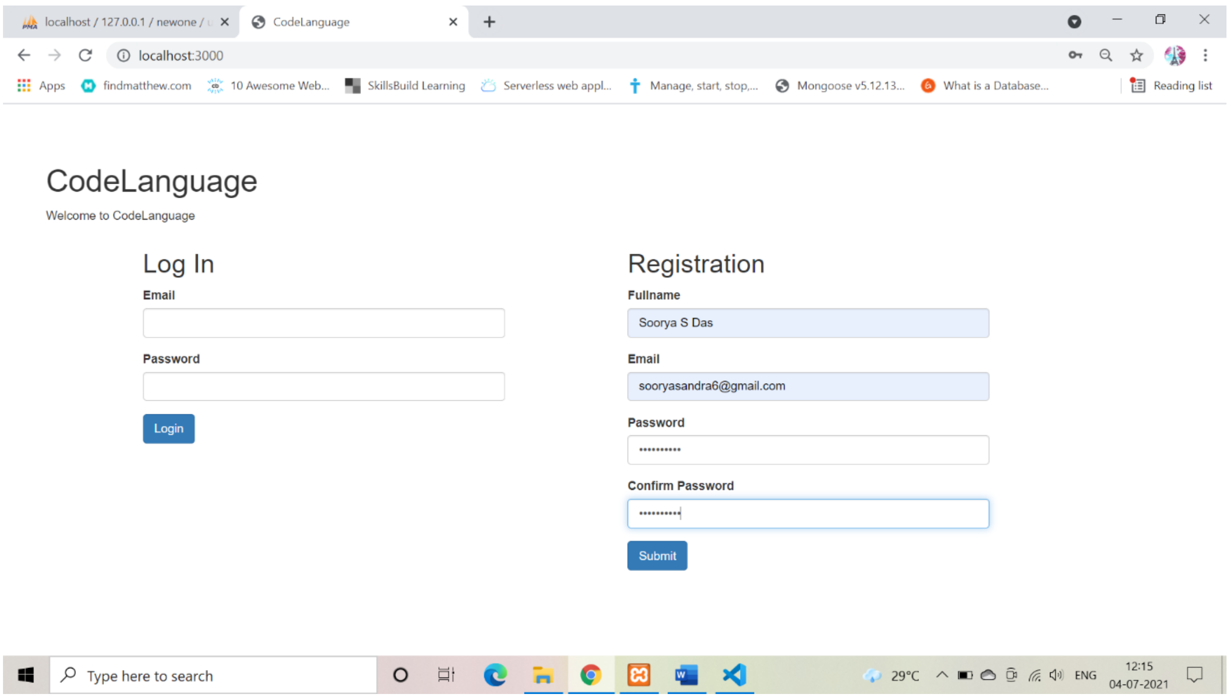
Email

Password

Confirm Password

Submit

Type here to search 29°C ENG 12:05 04-07-2021


localhost / 127.0.0.1 / newone / CodeLanguage

localhost:3000

Apps findmatthew.com 10 Awesome Web... SkillsBuild Learning Serverless web appl... Manage, start, stop,... Mongoose v5.12.13... What is a Database... Reading list

CodeLanguage

Welcome to CodeLanguage

Log In

Email

Password

Login

Registration

Fullname

Soorya S Das

Email

sooryasandra6@gmail.com

Password

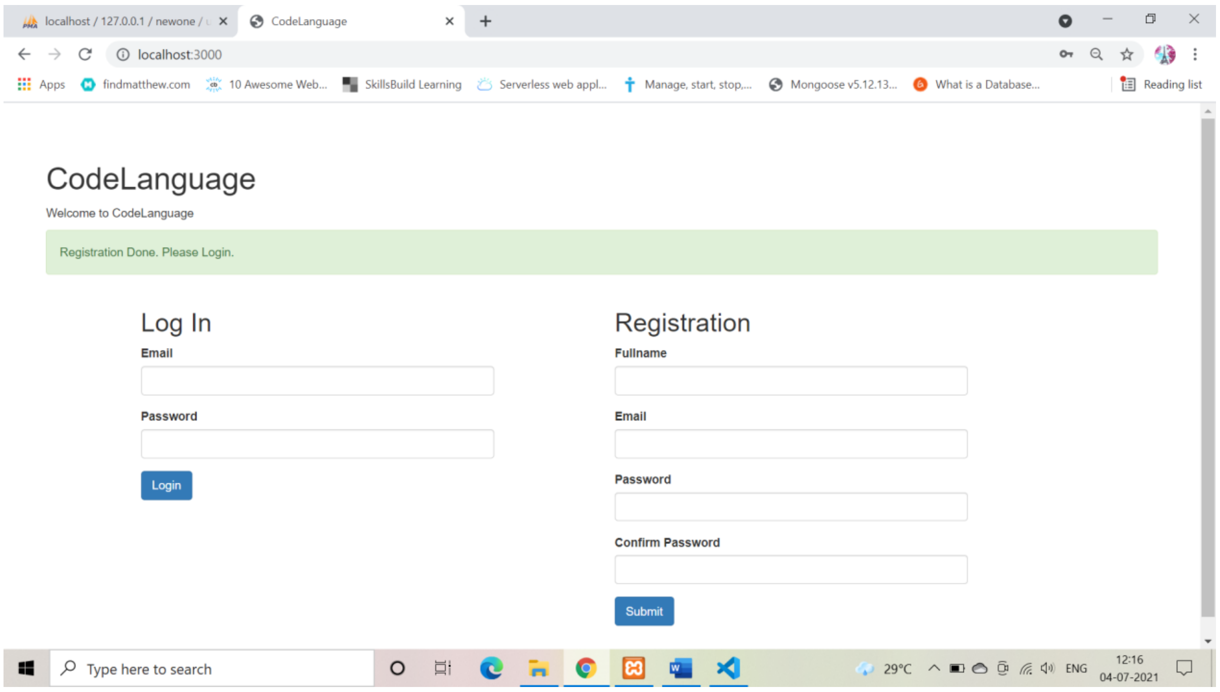
••••••••••

Confirm Password

••••••••••

Submit

Type here to search 29°C ENG 12:15 04-07-2021


CodeLanguage

Welcome to CodeLanguage

Registration Done. Please Login.

Log In

Email

Password

Registration

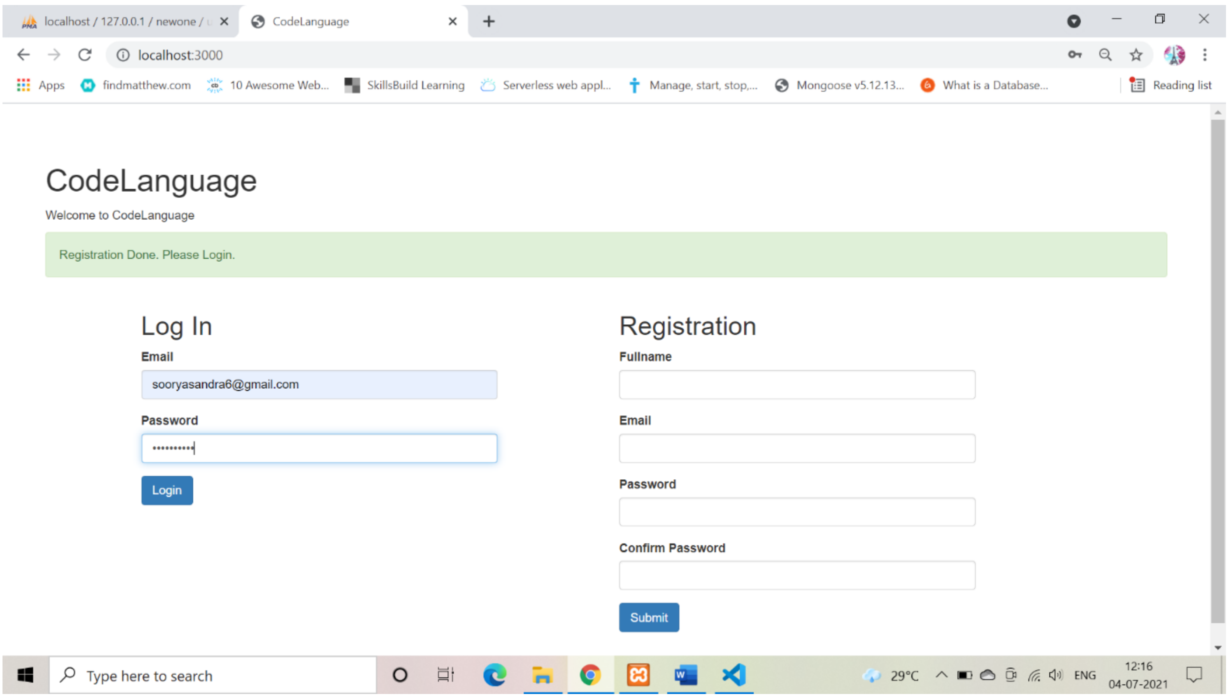
Fullname

Email

Password

Confirm Password

2. Login page


CodeLanguage

Welcome to CodeLanguage

Registration Done. Please Login.

Log In

Email: sooryasandra6@gmail.com

Password: ••••••••••

Registration

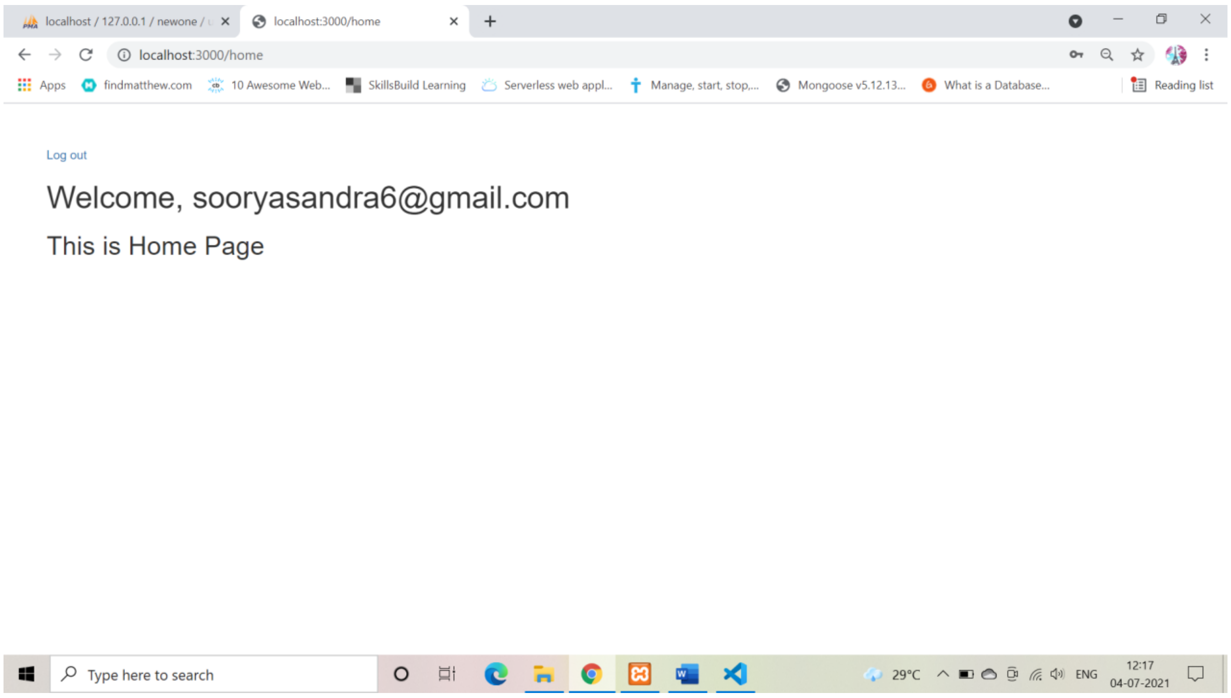
Fullname

Email

Password

Confirm Password

Login successful

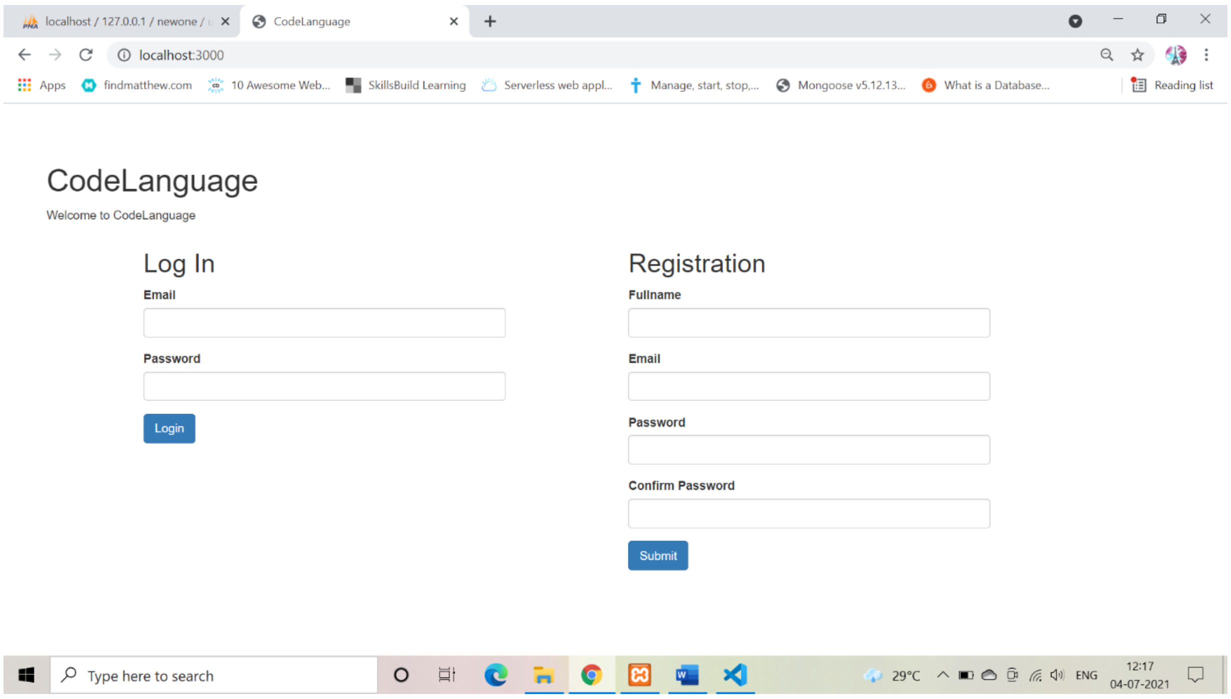


Log out

Welcome, sooryasandra6@gmail.com

This is Home Page

Logout successfully



CodeLanguage

Welcome to CodeLanguage

Log In

Email

Password

Login

Registration

Fullname

Email

Password

Confirm Password

Submit

6. CONCLUSION

The purpose of this project is to build a website for Employee Registration System. It is a computer system that helps manage the information related to Employees who worked the shop. Proper data collection and management are absolutely essential for ensuring that your company avoids data breach issues and the resulting loss of Employee trust. Furthermore, effective Employee data management is beneficial for your business period.

7. REFERENCE

1) https://www.w3schools.com

2) https://way2tutorial.com

3) https://www.tutorialrepublic.com