Online Internship At SSJ IT Solutions

Private Limited

A Report On Project

Aim-: 'To develop a platform with help of which students/parents and tutors/subject experts can easily connect with each other.'

Prepared By -: Mr. Vikram Singh

Mr. Shivam

Miss. Ishika Mittal

Miss. Ishita Roy Choudhury

Mr. Mukul Goyal

Mr. Nitin Verma

UNDER THE SUPERVISION OF

Mr. Utkarsh Upadhyay



"An India based IT company engaged in developing out-of-box IT services that aim to bring positive change."

Information Technology & Services || Raebareli, Uttar Pradesh"

DECLARATION

I certify that,

- a-) The work contained in the project is original & has been done by myself under the general supervision of my supervisor.
- b-) The work has not been submitted to any other company or institute or any where else.
- c-) I have followed the guidelines provided by the company.

Team-:

1-: Name -: Mr. Vikram Singh

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3-: Name -: Miss. Ishika Mittal

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5-: Name -: Mr. Mukul Goyal

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6-: Name -: Mr. Nitin Verma

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ACKNOWLEDGEMENT

The internship opportunity I had with SSJ IT Solutions Private Limited was a great chance for learning and professional development. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many wonderful people and professionals who led me though this internship period.

Bearing in mind previous I am using this opportunity to express my deepest gratitude and special thanks to the Mr. Utkarsh Upadhayay who in spite of being extraordinarily busy with her/his duties, took time out to hear, guide and keep me on the correct path and allowing me to carry out my project at their esteemed organization and extending during the training.

I perceive as this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation with all of you in the future, Sincerely,

TeachTeam

Frontend

Vikram, Ishita & Shivam worked on Frontend.

We had used react.js for building the frontend of the website.

1-: Tutor/Expert Name (Two fields i.e., First Name and Last Name)

2-: Email

3-: Phone Number

4-: Age

5-: Gender -> Dropdown package in react

6-: Experience (In months/years)

7-: Address (Different fields like Street/Road, House No., City, Area, PINCODE)

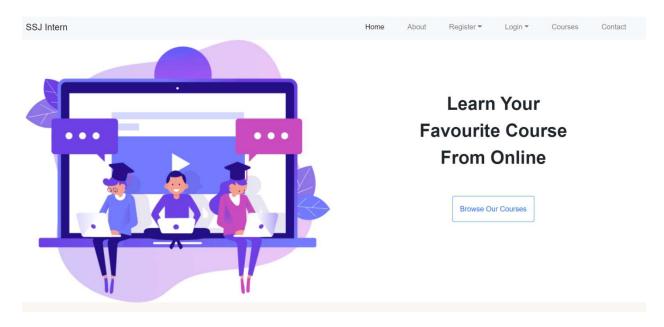
8-: Skills/Subject → Used multi-select dropdown package

9-: Available For: Online, Offline or both. → Dropdown package in react

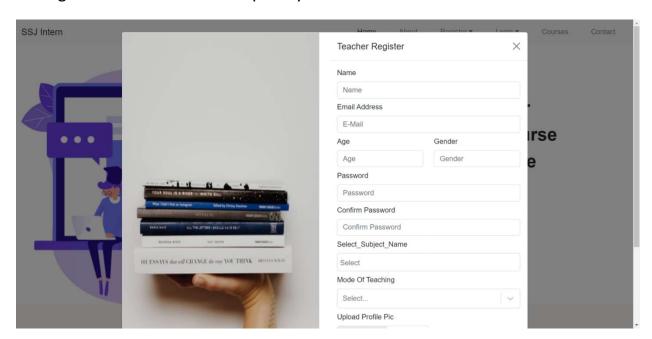
10-: Preferred time available for teach

11-: After filling the above fields, the form must be enabled to submit. In the next step, Profile Picture, and an ID Proof has to be asked to upload so that the profile would be complete. (This ID will be verified by the admin and then it will be approved).

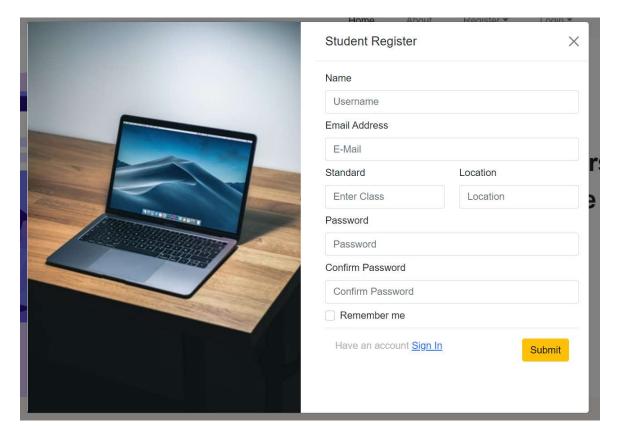
1-: Home Page -> Developed By Vikram



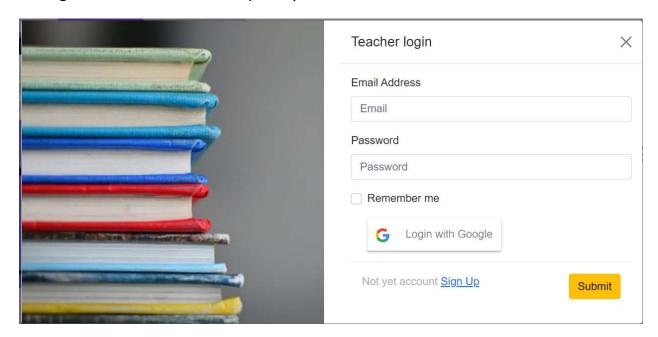
2-: Register as Teacher - Developed By Ishita



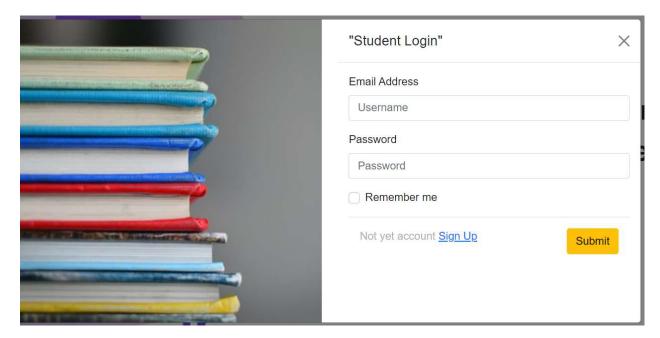
3-: Register as a Student/Parent-: Developed By Shivam



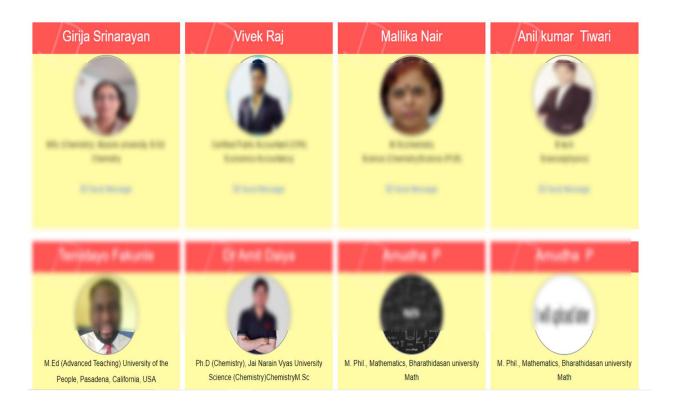
4-: Login as a Teacher-: Developed By Vikram



5-: Login as Student- Developed By Vikram



6-: Courses Page – Developed By Ishita & Shivam both.



Backend & Database

Nitin, Ishika & Mukul worked in backend and database connectivity. We had used node.js as a backend and mongoDB as a database.

- 1-: Authentication
- 2-: Teacher/Student Schema's
- 3-: Google Login
- 4-: Data saving in the database MongoDB
- 5-: Used different different packages like-:
- a-) Multer -: Multer is a node.js middleware for handling multipart/form-data, which is primarily used for uploading files. It is written on top of busboy for maximum efficiency.
- b-) Express: Express is a minimal and flexible Node.js web application framework that provides a robust set of features for web and mobile applications.
- c-) jwt Token- JSON Web Token (JWT) is a compact URL-safe means of representing claims to be transferred between two parties.

 The claims in a JWT are encoded as a JSON object that is digitally signed using JSON Web Signature (JWS).
- d-) Bycrypt
- e-) react-router-dom

1-: Connecting DB – Developed by Ishika

```
const mongoose = require('mongoose');
const DB = process.env.DATABASE;

mongoose.connect(DB,{
    useNewUrlParser: true,
    useCreateIndex: true,
    useUnifiedTopology: true,
    useFindAndModify: false
}).then(()=>{
    console.log(`Connection Successful`);
}).catch((err) => console.log(`No connection`));
```

2-: Authentication File - Developed By Mukul

```
const jwt = __require('jsonwebtoken');
const Teacher = require("../model/teachersDoc");

const authenticate = async(req, res, next) =>{
    try{
        const token = req.cookies.jwtoken;
        const verifyToken = jwt.verify(token, process.env.SECRET_KEY);

        const rootUser = await Teacher.findOne({_id:verifyToken._id, "tokens.token": token});

        if(!rootUser){ throw new Error('User not Found')}

        req.token = token;
        req.rootUser = rootUser;
        req.userID = rootUser._id;

        next();

}catch(err){
        res.status(401).send(('Unauthorized: No token Provided'));
    }
}
module.exports = authenticate;
```

```
const studentDoc = new mongoose.Sche
    name:{
        type: String,
        required: true
    standard:{
        type: String,
        required: true
    },
    location:{
        type: String,
        required: true
    },
    email: {
        type: String,
        required: true
    password: {
        type: String,
        required: true
    cpassword: {
        type: String,
        required: true
    tokens: [
            token:{
                type: String,
                required: true
})
```

4-: Model For Teacher - Developed By Nitin

```
const teachersbot = new mongoose.schema()
   name:{
      type: String,
      required: true
   age:{
       type: String,
       required: true
  },
   selectedGender:{
       type: String,
       required: true
   },
   email: {
       type: String,
       required: true
   },
   password: {
      type: String,
      required: true
   cpassword: {
      type: String,
      required: true
   },
   tokens: [
       {
           token:{
              type: String,
              required: true
   ],
   profile: {
                                 //Schema for Profile Pic
       type: String,
       required: true
   },
   idProof: {
                                 //Schema for Id Proof
       type: String,
       required: true
   },
   isApproved:{
       type: Boolean,
       required: true
   },
   subjectsOfInterest:{
                               //Schema for Subjects teacher's will teach
      type: String,
       required:true
   selectedModeOfTeaching:{ //Schema for Mode Of Teaching Online/Offline Or Both
      type: String,
      required:true
   }
})
```

5-: Pacakages-: Mukul, Ishika & Nitin Worked together

```
const express = require('express');
const router = express.Router();
const bcrypt = require('bcryptjs');
const jwt = require('jsonwebtoken');
const authenticate = require('../middleware/authenticate');
const multer = require('multer')
require('../db/conn');
const cors = require('cors');
const Teacher = require('../model/teachersDoc');
const Student = require('../model/studentDoc');

6-: Multer - Mukul worked on it.
//ar upload = multer({ storage: storage }) //Using Multer to store the profile pic and id Proof in the backe const cpUpload = upload.fields([{ name: 'profilePic', maxCount: 1 }, { name: 'identityProof', maxCount: 1 }])
```

- 7-: Database View How data is storing in it....
- a-) Teachers-:

```
_id: ObjectId("61386d531034cd2564537eac")
name: "Ishika"
age: "22"
gender: "Female"
email: "ishika@12"
password: "$2a$12$9nbVh0V3GGJhb5arN47UKOZOmuPOcTea74E2EkVe0ZSaLqMi4o9H2"
cpassword: "$2a$12$V9/glz69bFlUmuvryGLRXu9quN//Ydjm1xGHCoiD175wrWvjyoSDa"
profile: "1631086772504_user-2.jpg"
idProof: "1631086772504_G314.pdf"
isApproved: false
subjectsOfInterest: "Chemistry"
selectedModeOfTeaching: "Offline"
> tokens: Array
__v: 46
```

```
_id: ObjectId("61386fa31034cd2564537eaf")
name: "Mukul"
age: "22"
gender: "Male"
email: "mukul@12"
password: "$2a$12$eW9Ar3MDexe2efBpuiLQu.80LoVgb32joLseJE14JDqwTOFhfDeMG"
cpassword: "$2a$12$eUZVNSZ0VW33US0UrTV5oeEX9rnHNxsmdZWBc7YGPUd9C3T11EXjy"
profile: "1631086772504_user-4.jpg"
idProof: "1631086772504_G314.pdf"
isApproved: false
subjectsOfInterest: "Maths,Chemistry"
selectedModeOfTeaching: "Both"
> tokens: Array
__v: 0
```

```
_id: ObjectId("61386fc71034cd2564537eb2")
name: "Vikram"
age: "22"
gender: "Male"
email: "vikram@12"
password: "$2a$12$uF4KGzBN4CvdoL1FZAByi.VOUBkhoctJNTky/PqpFjZ6RQ.lrQq6m"
cpassword: "$2a$12$N3kWCNC5Xa0hKCyjT2DwDexTKcodoo85TFRoShwEwM/gqPDnkGa.e"
profile: "1631086772504_user-5.jpg"
idProof: "1631086772504_G314.pdf"
isApproved: false
subjectsOfInterest: "Physics, Chemistry"
selectedModeOfTeaching: "Offline"
> tokens: Array
__v: 0
```

b-) Student

```
_id: ObjectId("61364dbc5c3cdc1e18ab18c6")

name: "a@11"

standard: "11"

location: "d"

email: "a@1"

password: "$2a$12$9lmkkfp@K7/oRD8phNG@vOeC.etm5WZ3E.YZIhFDZtnOWdno1o/sK"

cpassword: "$2a$12$JwmuNvZZ6/OvASEIPy.MRulLj1RbhAsT3DAH1DWIdyJP1KbXTnB3y"

> tokens: Array

_v: 0
```

Remaining Work To Be Done

- 1-: Create Admin
- 2-: After login as a student the photos of teacher are not displaying, so we have to work over it.
- 3-: When a tutor/experts profile is clicked, his/her profile must open and except phone number, email and address, we have to show all the other details and also the reviews and ratings of the respective tutor.
- 4-: Option to book for demo.
- 5-: When clicked on demo, the preferred time of that particular tutor/expert will be shown.
- 6-: Choose the time and the request will be sent to the tutor/expert.
- 7-: When tutor accepts, the student/parent will be notified.
- 8-: Demo classes will only be provided in online mode, so the scheduled class must be reflected in either the profile section of the student or we can give a separate option for the same.
- 9-: Update Profile

CONCLUSION

The concept of traditional education has changed radically within the last couple of years. Being physically present in a classroom isn't the only learning option anymore — not with the rise of the internet and new technologies, at least.

Nowadays, you have access to a quality education whenever and wherever you want, as long as you can get online. We are now entering a new era — the revolution of online education.

There's no need to discount the skepticism surrounding education through the internet. It's hard to understand the notion of leaving behind the conventional classroom, especially if it's to face this vast space called The Internet.

However, that's not reason enough to shy away from this alternative, which has proven to be valid and useful for many students.

According to the most recent survey from Babson Survey Research Group, over 30 percent of higher education students in the United States are taking at least one distance course. Online education is a sensible choice whether you're a teenager or an adult. As a student, this can be a useful learning method for sharpening your skills in a difficult subject, or learning a new skill.