

Bengaluru, Karnataka, India



AN INTERNSHIP REPORT  
ON  
“ CGPA/SGPA CALCULATOR ”  
**BACHELOR OF ENGINEERING**  
In  
**COMPUTER SCIENCE AND ENGINEERING**

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## Sapthagiri College of Engineering

(Affiliated to Visvesvaraya Technological University and Approved by AICTE, New Delhi) Accredited By

NAAC with ‘A’ Grade

ISO 9001-2015 and 14001-2015 certified Institute

**Bengaluru, Karnataka 560057**

**2022-2023**

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## ABOUT THE COMPANY

CST is a digital service provider that aims to provide software, designing and marketing solutions to individuals and businesses. At CST , we believe that service and quality is the key to success We provide all kinds of technological and designing solutions from Billing Software to Web Designs or any custom demand that you may have. Experience the service like none other!

Some of our services include:

- Development - We develop responsive, functional and super-fast websites.
- We keep User Experience in mind while creating websites. A website should load quickly and should be accessible even on a small view-port and slow internet connection.
- Mobile Application - We offer a wide range of professional Android, iOS& Hybrid app development services for our global clients, from a start up to a large enterprise.
- Design - We offer professional Graphic design, Brochure design & Logo design. We are experts in crafting visual content to convey the right message to the customers.
- Consultancy - We are here to provide you with expert advice on your design and development requirement.
- Videos - We create a polished professional video that impresses your audience.

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## OVERVIEW OF THE PROJECT

**Project Name:** CGPA/SGPA CALCULATOR

This project is based on Web Development and its Applications. The main objective of this project is to learn the implementation of HTML, CSS and JavaScript at frontend and PHP, MySQL database at backend, The webpage of this project is created using HTML and styling of the webpage is done using CSS.

It is a web application that simplifies the task of storing a users results . The system is flexible to be used and reduces the need of frequently searching and accessing an individuals marks. The system is developed to provide an easy means for storing semester wise results. Individuals have to login and enter their marks in a form. They can then access the result and print it in a PDF format.

### 1. USER MODULE

This module is mainly dedicated to the candidates who are looking to store their result. They can log in into the system, via the credentials provided to them & once they are in, they have to enter their data by filling an online form . They can download the result from the same module, in PDF file format.

### 2. ADMIN MODULE

This module is maintained by the admin and only he/she can manage and have access to every account. Admin can add or delete the users as well. They can modify the functionalities of the system, too. Admin can also add users on the fly to the application to make the application full of new functionalities.

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## **CGPA/SGPA Calculator**

- SGPA stands for semester grade point average which is calculated over percentage.
- Simple Design, Easy to Use, and Free
- Automatic Calculation
- User has to Input his semester marks and SGPA Calculator will calculate the SGPA for respective semester.
- User can also calculate CGPA by inputting SGPA of his respective semester.

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## **TOOLS USED**

### **Software Requirements**

- JetBrains Webstorm 2021.2.
- Safari and Brave of latest version.
- Front End: HTML, CSS, Nuxt.js
- Backend : Google Fire
- Linux 7.1 or Windows XP/7/8/10 OS or Mac OS

### **Hardware Requirements**

- Pentium 200-MHz computer with a minimum of 64 MB of RAM (128 MB of RAM recommended).
- Monitor with a refresh rate of at least 40Hz for a smooth GUI experience (optional).

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## IMPLEMENTATION

**File Name : Firebase.js**

```
import { getApps, initializeApp } from 'firebase/app';
import { getAuth } from 'firebase/auth';
import { getFirestore } from 'firebase/firestore';
const firebaseConfiguration = {
  apiKey: "AIzaSyA0354p0txZSZ-aPvp9RvsalR5LFTNhGW8",
  authDomain: "compssoft-gpa-calc-207d7.firebaseio.com",
  projectId: "compssoft-gpa-calc-207d7",
  storageBucket: "compssoft-gpa-calc-207d7.appspot.com",
  messagingSenderId: "229545567517",
  appId: "1:229545567517:web:bb8242236ff0ff9108edf4"
}
let app ;
const Apps = getApps();
if(!Apps.length){
  app = initializeApp(firebaseConfiguration);
} else {
  app = Apps[0];
}
export const Authenticator = getAuth(app, {});
export const Database = getFirestore(app, {});
```

---

---

### File Name : Autentication/index.js import

```
import { Authenticator } from '@/plugins/firebase';
import { signInWithEmailAndPassword, createUserWithEmailAndPassword } from
'firebase/auth';
import Cookie from 'js-cookie';

export const state = () => ({
user : null
});
export const mutations = {
SET_USER: (state, currentUser) => {
state.user = currentUser;
}
}
export const actions = {

async userSignUp({ commit }, UserCredentials){
try{
await createUserWithEmailAndPassword(Authenticator, UserCredentials.email,
UserCredentials.password);
const UserToken = await Authenticator.currentUser.getIdToken();
const { email, photoURL, emailVerified, uid } = Authenticator.currentUser;
Cookie.set('AccessToken', UserToken);
commit('SET_USER', { email, uid, emailVerified, photoURL});
}catch (e) {
throw e;
}
},
async userSignIn({ commit }, UserCredentials){
try {
await signInWithEmailAndPassword(Authenticator, UserCredentials.email,
UserCredentials.password);
const UserToken = await Authenticator.currentUser.getIdToken();
const { email, uid, emailVerified, photoURL } = Authenticator.currentUser;
Cookie.set('AccessToken', UserToken);
commit('SET_USER', { email, uid, emailVerified, photoURL});
}catch (e) {
throw e;
}
}
export const getters = {
getCurrentUserID(state){
return state.user.uid;
}
}
```

## File Name: pages/index.vue

```
<template>
<div class="mainContainer">
  <div class="sideHeaderContainer">
    <div class="introductionContainer">
      <p class="designedText">Accuracy you always <br>needed.</p>
      <p>A reliable SGPA calculator from <br>CompSoft Technologies.</p>
      <p></p>
    </div>
  </div>

  <div class="formContainer" v-if="isSignUp">

    <div class="signupHead">
      <p>Sign Up</p>
    </div>
    <form @submit.prevent="executeSignUp">

      <div class="nameContainer">
        <input type="text" v-model="firstName" placeholder="First name" required>
        <input type="text" v-model="lastName" placeholder="Last name" >
      </div>
      <input type="text" v-model="username" placeholder="Username" required>
      <input type="email" v-model="userCredentials.email" placeholder="Email" required>
      <input type="password" v-model="userCredentials.password" placeholder="Password" required>
      <input type="password" v-model="userCredentials.confirmPassword" placeholder="Confirm Password" required>

      <div class="buttonContainer">
        <button type="submit">Continue</button>
      </div>
    </form>

    <div class="messageContainer" v-if="resMessageBoolean">
      <div class="message">
        <p><strong>Error : </strong> {{ this.responseMessage }}</p>
      </div>
    </div>

    <div class="linkContainer">
      <p><strong>Already a user? </strong><button class="switchForm" @click="switchForm">Login</button></p>
    </div>
  </div>

  <div class="formContainer" v-if="!isSignUp">

    <div class="signupHead">
      <p>SignIn</p>
    </div>
```

```
</div>
<form @submit.prevent="executeSignIn">

    <input type="email" v-model="userCredentials.email" placeholder="Email" required>
    <input type="password" v-model="userCredentials.password" placeholder="Password" required>

    <div class="buttonContainer">
        <button type="submit">Continue</button>
    </div>
</form>

<div class="messageContainer" v-if="resMessageBoolean">
    <div class="message">
        <p><strong>Error : </strong> {{ this.responseMessage }}</p>
    </div>
</div>

<div class="linkContainer">
    <p><strong>New user? </strong><button class="switchForm" @click="switchForm">Sign Up</button></p>
    </div>
</div>
</div>
</template>

<script>
import { Database } from '@/plugins.firebaseio';
import { getDoc, doc, setDoc } from 'firebase/firestore';

export default {
  data() {
    return {
      userCredentials : {
        email : '',
        password: '',
        confirmPassword: ''
      },
      firstName: '',
      lastName: '',
      username : '',
      responseMessage : '',
      resMessageBoolean : false,
      isSignUp : true,
    }
  },
  methods: {
    switchForm(){
      this.isSignUp = !this.isSignUp;
    },
    async executeSignUp(){

if(this.userCredentials.password !== this.userCredentials.confirmPassword){
```

```
=====

this.resMessageBoolean = true;

this.responseMessage = "Confirm password doesn't match.";
setTimeout(() => {
  this.resMessageBoolean = false;
}, 5000)

} else {
  const userDataSnapshot = await getDoc(doc(Database, "CSTUsers",
this.username));
  if(userDataSnapshot.exists()) {
    this.resMessageBoolean = true;
    this.responseMessage = 'Username already exists.'
    setTimeout(() => {
      this.resMessageBoolean = false;
    }, 5000)
  }else{

    this.$store.dispatch('Authentication/userSignUp', this.userCredentials)
    .then(() => {
      this.executeCreateAccount();
    }).catch( e => {
      this.resMessageBoolean = true;
      this.responseMessage = e.message;
      setTimeout(() => {
        this.resMessageBoolean = false;
      }, 5000)
    });
  }
},
async executeCreateAccount(){
  await setDoc(doc(Database, "CSTUsers", this.username), {
    UserID : this.$store.getters["Authentication/getCurrentUserUID"],
    Username : this.username,
    UserFirstName : this.firstName,
    UserLastName : this.lastName,
    UserCreatedOn : new Date().getTime(),
    Results : []
  }).then(() => {
    this.createUsername();
  }).catch(e => {
    throw e;
  })
},
async createUsername(){
  await setDoc(doc(Database, "CSTUsersUID",
this.$store.getters["Authentication/getCurrentUserUID"]), {
    Username : this.username
  }).then(() => {

this.$router.push(`/user/${this.$store.getters['UserUsername/loadUserUsername']}`)

}).catch( e => {
```

```
=====

throw e;
    })
},
async executeSignIn(){
    await this.$store.dispatch('Authentication/userSignIn', this.userCredentials)
        .then(() => {
            this.$store.dispatch('UserUsername/getUserUsername',
this.$store.getters['Authentication/getCurrentUserID'])
            .then(() => {

this.$router.push(`/user/${this.$store.getters['UserUsername/loadUserUsername']}`)
        })
    })
}
}
</script>

<style scoped>
*{
    margin: 0;
    padding: 0;
}

.mainContainer{
    width: 1200px;
    display: flex;
    padding: 10px;
    margin: 50px auto auto;
}

.sideHeaderContainer{
    width: 700px;
}

.formContainer{
    padding: 30px;
    width: 300px;
    border: 3px #61892F solid;
    border-radius: 10px;
    height: auto;
    display: grid;
    align-content: center;
    align-items: center;
    margin: 60px auto auto;
}
.signupHead{
    width: 100px;
    font-size: 30px;
    font-weight: bold;
    margin: auto auto 10px;
```

```
=====

color: #86C232;
}

.nameContainer{
  display: flex;
}

input{
  margin-bottom: 10px;
  background-color: #222629;
  padding: 10px;
  border: none;
  width: 90%;
  color: #AAABB8;
  font-size: 19px;
  outline: none;
  border-radius: 5px;
}

.messageContainer{
  border: 1px solid rgba(255, 0, 0, 0.50);
  background-color: rgba(255, 0, 0, 0.2);
  border-radius: 5px;
  width: 275px;
  margin: 10px auto auto;
  padding: 10px;
  color: #AAABB8;
}

.linkContainer{
  width: 160px;
  margin: 10px auto auto;
  color: #AAABB8;
}
.linkContainer a{
  color: #86C232;
  text-decoration: none;
}

.buttonContainer{
  text-align: center;
  align-items: center;
  align-content: center;
  width: 160px;
  height: auto;
  margin: 10px auto auto;
}

.buttonContainer button{
  border: 1px solid #86C232;
  background-color: #222629;
  color: #AAABB8;
  font-size: 17px;
  font-weight: bold;
```

```
=====

border-radius: 5px;
padding: 10px 40px 10px 40px;
}

.buttonContainer button:hover{
background-color: rgba(97, 137, 47, 0.70);
}

.buttonContainer button:hover:after{
background-color: #61892F;
}

.introductionContainer{
width: 500px;
height: auto;
text-align: center;
align-items: center;
align-content: center;
color: #AAABB8;
font-size: 18px;
margin: 200px auto auto;
}

.designedText{
font-size: 50px;
font-weight: bold;
-webkit-background-clip: text;
-webkit-text-fill-color: transparent;
background-color: #F4D03F;
background-image: linear-gradient(132deg, #F4D03F 0%, #16A085 100%);
}

.switchForm{
border: none;
color: #86C232;
background : #222629;
font-size: 16px;
}

</style>
```

---

---

### File Name: username/index.vue

```
<template>
<div class="mainContainer">
  <div class="sgpaNcgpaContainer">
    <div class="sgpaContainer" @click="redirectToSGPA">
      
      <p class="buttonDescription">SGPA</p>
    </div>

    <div class="cgpaContainer" @click="redirectToCGPA">
      
      <p class="buttonDescription">CGPA</p>
    </div>
  </div>
</div>
</template>

<script>
export default {
  name: "index",
  methods: {
    redirectToSGPA(){

this.$router.push(`/user/${this.$store.getters['UserUsername/loadUserUsername']}/sgpacalculator`)
  },
    redirectToCGPA(){

this.$router.push(`/user/${this.$store.getters['UserUsername/loadUserUsername']}/cgpacalculator`)
  }
  },
  created() {
    this.$store.dispatch('UserUsername/getUserUsername',
this.$store.getters['Authentication/getCurrentUserID']);
  }
}
</script>

<style scoped>
*{
  margin: 0;
  padding: 0;
  font-family: Roboto Condensed, "Helvetica Neue", sans-serif;
}

body{
  background-color: #222629;
  height: 100%;
  margin: 0;
  background-repeat: no-repeat;
  background-attachment: fixed;
  font-family: Roboto Condensed, "Helvetica Neue", sans-serif;
}
```

```
=====

.sgpaNcgpaContainer{

    display: flex;
    padding: 50px;
    margin: 100px auto auto;
    align-content: center;
    align-items: center;
    width: 400px;
}

.sgpaContainer, .cgpaContainer{
    border: 3px solid rgba(255, 255, 255, 0.31);
    margin: auto;
    align-items: center;
    text-align: center;
    align-content: center;
    border-radius: 10px;
    padding: 50px 50px 70px;
}

.sgpaContainer{
    margin-right: 20px;
}

.cgpaContainer img{
    margin-top: 30px;
    width: 100px;
    height: auto;
}

.sgpaContainer img{
    margin-top: 30px;
    width: 100px;
    height: auto;
}

.cgpaContainer:after{
    color: #2b3134;
    border-color: rgba(255, 255, 255, 0.31);
}

.cgpaContainer:hover{
    border-color: #86C232;
}
.cgpaContainer:hover:after{
    border-color: #86C232;
}
.cgpaContainer:active:after{
    border-color: #86C232;
}
```

```
=====

.sgpaContainer:after{
  color: #2b3134;
  border-color: rgba(255, 255, 255, 0.31);
}

.sgpaContainer:hover{
  border-color: #86C232;
}
.sgpaContainer:hover:after{
  border-color: #86C232;
}
.sgpaContainer:active:after{
  border-color: #86C232;
}

.buttonDescription{

  width: 100px;
  margin: 10px auto auto;
  text-align:center;
  align-items: center;
  align-content: center;
  color: #AAABB8;

}
</style>
```

File Name: sgpaCalculator\index.vue

```
<template>
<div class="mainContainer">
  <div class="schemeBranchSelector">

    <p class="semSelector">SEMESTER : </p>
    <select name="branch" id="branch" v-model="semesterValue">
      <option value="" selected>SELECT SEMESTER</option>
      <option value="1st & 2nd Physics Cycle">1st & 2nd (PHYSICS CYCLE)</option>
      <option value="1st & 2nd Chemistry Cycle">1st & 2nd (CHEMISTRY CYCLE)</option>
      <option value="3rd Sem All Branch">3rd (All Branch)</option>
      <option value="4th Sem All Branch">4th (All Branch)</option>
      <option value="5th Sem All Branch">5th (All Branch)</option>
      <option value="6th Sem All Branch">6th (All Branch)</option>
      <option value="7th Sem CSE,ISE,ECE,EEE,CV">7th (CSE, ISE)</option>
      <option value="7th Sem E&C/E&E,Civil">7th (E&C/E&E,Civil)</option>
      <option value="8TH Sem All Branch">8th (All Branch)</option>
    </select>

    <button @click="semSelection">CONTINUE</button>

  </div>

  <div class="headContainer" v-if="physicForm">
    <p>Enter Marks:</p>
    <form @submit.prevent="Calc">

      <input type="number" placeholder="18MAT11/21" v-model="subjectCodes.scMAT11_21">
      <input type="number" placeholder="18PHY12/22" v-model="subjectCodes.scPHY12_22">
      <input type="number" placeholder="18ELE13/23" v-model="subjectCodes.scELE13_23">
      <input type="number" placeholder="18CIV14/24" v-model="subjectCodes.scCIV14_24">
      <input type="number" placeholder="18EGDL15/25" v-
model="subjectCodes.scEGDL15_25">
      <input type="number" placeholder="18PHYL16/26" v-
model="subjectCodes.scPHYL16_26">
      <input type="number" placeholder="18EEL17/27" v-
model="subjectCodes.scEEL17_27">
      <input type="number" placeholder="18EGH18/28" v-model="subjectCodes.scEGH18_28">

      <div class="buttonContainer">
        <button type="submit">CALCULATE</button>
      </div>
    </form>
  </div>

  <div class="headContainer" v-if="chemistryForm">
    <p>Enter Marks:</p>
    <form @submit.prevent="Calc">

      <input type="number" placeholder="18MAT11/21" v-model="subjectCodes.scCMAT11_21">
      <input type="number" placeholder="18CHE12/22" v-model="subjectCodes.scCHE12_22">
      <input type="number" placeholder="18CPS13/23" v-model="subjectCodes.scCPS13_23">
    </form>
  </div>
</div>
```

```


---



---



```
<input type="number" placeholder="18ELN14/24" v-model="subjectCodes.scELN14_24">
<input type="number" placeholder="18ME15/25" v-model="subjectCodes.scME15_25">
<input type="number" placeholder="18CHEL16/26" v-
model="subjectCodes.scCHEL16_26">
    <input type="number" placeholder="18CPL17/27" v-model="subjectCodes.scCPL17_27">
    <input type="number" placeholder="18EGH18/28" v-model="subjectCodes.scCEGH18_28">

    <div class="buttonContainer">
        <button type="submit">Calculate SGPA</button>
    </div>
</form>
</div>

<div class="headContainer" v-if="sem3Form">
    <p>Enter Marks : </p>

    <form @submit.prevent="Calc">

        <input type="number" placeholder="18MAT31" v-model="subjectCodes.scMAT31">
        <input type="number" placeholder="18XX32" v-model="subjectCodes.scXX32">
        <input type="number" placeholder="18XX33" v-model="subjectCodes.scXX33">
        <input type="number" placeholder="18XX34" v-model="subjectCodes.scXX34">
        <input type="number" placeholder="18XX35" v-model="subjectCodes.scXX35">
        <input type="number" placeholder="18XX36" v-model="subjectCodes.scXX36">
        <input type="number" placeholder="18XXL37" v-model="subjectCodes.scXXL37">
        <input type="number" placeholder="18XXL38" v-model="subjectCodes.scXXL38">
        <input type="number" placeholder="18CPC39/49 OR KANNADA" v-
model="subjectCodes.scCPC39_49">

        <div class="buttonContainer">
            <button type="submit">Calculate SGPA</button>
        </div>
    </form>
</div>

<div class="headContainer" v-if="sem4Form">
    <p>Enter Marks:</p>

    <form @submit.prevent="Calc">

        <input type="number" placeholder="18MAT41" v-model="subjectCodes.scMAT41">
        <input type="number" placeholder="18XX42" v-model="subjectCodes.scXX42">
        <input type="number" placeholder="18XX43" v-model="subjectCodes.scXX43">
        <input type="number" placeholder="18XX44" v-model="subjectCodes.scXX44">
        <input type="number" placeholder="18XX45" v-model="subjectCodes.scXX45">
        <input type="number" placeholder="18XX46" v-model="subjectCodes.scXX46">
        <input type="number" placeholder="18XXL47" v-model="subjectCodes.scXXL47">
        <input type="number" placeholder="18XXL48" v-model="subjectCodes.scXXL48">
        <input type="number" placeholder="18CPC39/49 or Kannada" v-
model="subjectCodes.scC4PC39_49">
```


```

```
<div class="buttonContainer">
    <button type="submit">Calculate SGPA</button>
</div>
</form>
</div>

<div class="headContainer" v-if="sem5Form">
    <p>Enter Marks : </p>

    <form @submit.prevent="Calc">

        <input type="number" placeholder="18XX51" v-model="subjectCodes.scXX51">
        <input type="number" placeholder="18XX52" v-model="subjectCodes.scXX52">
        <input type="number" placeholder="18XX53" v-model="subjectCodes.scXX53">
        <input type="number" placeholder="18XX54" v-model="subjectCodes.scXX54">
        <input type="number" placeholder="18XX55" v-model="subjectCodes.scXX55">
        <input type="number" placeholder="18XX56" v-model="subjectCodes.scXX56">
        <input type="number" placeholder="18XXL57" v-model="subjectCodes.scXXL57">
        <input type="number" placeholder="18XXL58" v-model="subjectCodes.scXXL58">
        <input type="number" placeholder="ENVIRONMENTAL STUDIES" v-
model="subjectCodes.scENV_STUDIES">

        <div class="buttonContainer">
            <button type="submit">Calculate SGPA</button>
        </div>
    </form>
</div>
<div class="headContainer" v-if="sem6Form">
    <p>Enter Marks:</p>
    <form @submit.prevent="Calc">

        <input type="number" placeholder="18XX61" v-model="subjectCodes.scXX61">
        <input type="number" placeholder="18XX62" v-model="subjectCodes.scXX62">
        <input type="number" placeholder="18XX63" v-model="subjectCodes.scXX63">
        <input type="number" placeholder="18XX64" v-model="subjectCodes.scXX64">
        <input type="number" placeholder="18XX65" v-model="subjectCodes.scXX65">
        <input type="number" placeholder="18XX66" v-model="subjectCodes.scXX66">
        <input type="number" placeholder="18XXL67" v-model="subjectCodes.scXXL67">
        <input type="number" placeholder="18XXMP68 (Mini-Projet)" v-
model="subjectCodes.scXXMP68">

        <div class="buttonContainer">
            <button type="submit">Calculate SGPA</button>
        </div>
    </form>
</div>

<div class="headContainer" v-if="sem7_1Form">
    <p>Enter Marks : </p>
```

```

===== @submit.prevent="Calc">

<input type="number" placeholder="18CS71" v-model="subjectCodes.scCS71">
<input type="number" placeholder="18CS72" v-model="subjectCodes.scCS72">
  <input type="number" placeholder="18CS73X" v-model="subjectCodes.scCS73X">
  <input type="number" placeholder="18CS74X" v-model="subjectCodes.scCS74X">
  <input type="number" placeholder="18CS75X" v-model="subjectCodes.scCS75X">
  <input type="number" placeholder="18CSL76" v-model="subjectCodes.scCSL76">
  <input type="number" placeholder="18CSP77" v-model="subjectCodes.scCSP77">

  <div class="buttonContainer">
    <button type="submit">Calculate SGPA</button>
  </div>
</form>
</div>

<div class="headContainer" v-if="sem7_2Form">
  <p>Enter Marks : </p>
  <form @submit.prevent="Calc">
    <input type="number" placeholder="18XX71" v-model="subjectCodes.scXX71">
    <input type="number" placeholder="18XX72" v-model="subjectCodes.scXX72">
    <input type="number" placeholder="18XX73X" v-model="subjectCodes.scXX73X">
    <input type="number" placeholder="18XX74X" v-model="subjectCodes.scXX74X">
    <input type="number" placeholder="18XX75X" v-model="subjectCodes.scXX75X">
    <input type="number" placeholder="18XXL76" v-model="subjectCodes.scXXL76">
    <input type="number" placeholder="18XXL77" v-model="subjectCodes.scXXL77">
    <input type="number" placeholder="18XXP78" v-model="subjectCodes.scXXP78">

    <div class="buttonContainer">
      <button type="submit">Calculate SGPA</button>
    </div>
  </form>
</div>

<div class="headContainer" v-if="sem8Form">
  <p>Enter Marks : </p>
  <form @submit.prevent="Calc">
    <input type="number" placeholder="18XX81" v-model="subjectCodes.scXX81">
    <input type="number" placeholder="18XX82X" v-model="subjectCodes.scXX82X">
    <input type="number" placeholder="18XXP83" v-model="subjectCodes.scXXP83">
    <input type="number" placeholder="18XXS84" v-model="subjectCodes.scXXS84">
    <input type="number" placeholder="18XX185 (Internship)" v-
model="subjectCodes.scXX185">

    <div class="buttonContainer">
      <button type="submit">Calculate SGPA</button>
    </div>
  </form>
</div>

<div class="resultContainer" v-if="showResult">
  <p><span class="designedText">{{ this.aggregate.toFixed(1) }} </span> / 10.0</p>
</div>

```

```
=====
</div>
</template>

<script>
export default {
  name: "index",
  data(){
    return {

      subjectCodes: {

        scMAT11_21: 0,
        scPHY12_22: 0,
        scELE13_23: 0,
        scCIV14_24: 0,
        scEGDL15_25: 0,
        scPHYL16_26: 0,
        scELEL17_27: 0,
        scEGH18_28: 0,
        scCMAT11_21: 0,
        scCHE12_22: 0,
        scCPS13_23: 0,
        scELN14_24: 0,
        scME15_25: 0,
        scCHEL16_26: 0,
        scCPL17_27: 0,
        scCEGH18_28: 0,
        scMAT31: 0,
        scXX32: 0,
        scXX33: 0,
        scXX34: 0,
        scXX35: 0,
        scXX36: 0,
        scXXL37: 0,
        scXXL38: 0,
        scCPC39_49: 0,
        scMAT41: 0,
        scXX42: 0,
        scXX43: 0,
        scXX44: 0,
        scXX45: 0,
        scXX46: 0,
        scXXL47: 0,
        scXXL48: 0,
        scC4PC39_49: 0,
        scXX51: 0,
        scXX52: 0,
        scXX53: 0,
        scXX54: 0,
        scXX55: 0,
        scXX56: 0,
        scXXL57: 0,
        scXXL58: 0,
        scENV_STUDIES: 0,
        scXX61: 0,
        scXX62: 0,
      }
    }
  }
}
```

```
scXX63: 0,
scXX64: 0,
scXX65: 0,
scXX66: 0,
scXXL67: 0,
scXXMP68: 0,
scCS71: 0,
scCS72: 0,
scCS73X: 0,
scCS74X: 0,
scCS75X: 0,
scCSL76: 0,
scCSP77: 0,
scXX71: 0,
scXX72: 0,
scXX73X: 0,
scXX74X: 0,
scXX75X: 0,
scXXL76: 0,
scXXL77: 0,
scXXP78: 0,
scXX81: 0,
scXX82X: 0,
scXXP83: 0,
scXXS84: 0,
scXX185: 0

},
semesterValue: '',
physicForm: false,
chemistryForm: false,
sem3Form: false,
sem4Form: false,
sem5Form: false,
sem6Form: false,
sem7_1Form: false,
sem7_2Form: false,
sem8Form: false,
aggregate: 0,
showResult: false,

physicsCycleCredits : {

    pMAT11_21: 4,
    pPHY12_22: 4,
    pELE13_23: 3,
    pCIV14_24: 3,
    pEGDL15_25: 3,
    pPHYL16_26: 1,
    pEEL17_27: 1,
    pEGH18_28: 1,

},
chemistryCycleCredits: {

    cMAT11_21: 4,
```

~~=====~~  
cCHE12\_22: 4,  
cCPS13\_23: 3,  
cELN14\_24: 3,  
cME15\_25: 3,  
cCHEL16\_26: 1,  
cCPL17\_27: 1,  
cEGH18\_28: 1

},

sem3Credits : {

MAT31: 4,  
XX32: 4,  
XX33: 3,  
XX34: 3,  
XX35: 3,  
XX36: 3,  
XXL37: 2,  
XXL38: 2,  
CPC39\_49: 1

},

sem4Credits : {

MAT41: 4,  
XX42: 4,  
XX43: 3,  
XX44: 4,  
XX45: 3,  
XX46: 3,  
XXL47: 2,  
XXL48: 2,  
C4PC39\_49: 1

},

sem5Credits: {

XX51: 3,  
XX52: 4,  
XX53: 4,  
XX54: 3,  
XX55: 3,  
XX56: 4,  
XXL57: 2,  
XXL58: 2,  
ENV\_STUDIES: 1

},

sem6Credits: {

XX61: 4,  
XX62: 4,

```
=====
```

```
    XX63: 4,  
    XX64: 3,  
    XX65: 3,  
    XX66: 2,  
    XXL67: 2,  
    XXMP68: 2,  
  
,  
  
sem7ACredits: {  
  
    CS71: 4,  
    CS72: 4,  
    CS73X: 3,  
    CS74X: 3,  
    CS75X: 3,  
    CSL76: 2,  
    CSP77: 2  
  
,  
  
sem7BCredits: {  
  
    XX71: 3,  
    XX72: 3,  
    XX73X: 3,  
    XX74X: 3,  
    XX75X: 3,  
    XXL76: 2,  
    XXL77: 2,  
    XXP78: 2  
  
,  
  
sem8Credits: {  
  
    XX81: 3,  
    XX82X: 3,  
    XXP83: 8,  
    XXS84: 1,  
    XX185: 3  
  
}  
}  
  
},  
  
methods: {  
    semSelection() {  
        this.switchForm();  
    },  
  
    switchForm() {  
        if (this.semesterValue === '1st & 2nd Physics Cycle') {  
            this.physicForm = true;  
            this.chemistryForm = false;  
        }  
    },  
}
```

```
        this.sem3Form = false;
        this.sem4Form = false;
        this.sem5Form = false;
        this.sem6Form = false;
        this.sem7_1Form = false;
        this.sem7_2Form = false;
        this.sem8Form = false;
    } else if (this.semesterValue === '1st & 2nd Chemistry Cycle') {
        this.chemistryForm = true;
        this.physicForm = false;
        this.sem3Form = false;
        this.sem4Form = false;
        this.sem5Form = false;
        this.sem6Form = false;
        this.sem7_1Form = false;
        this.sem7_2Form = false;
        this.sem8Form = false;
    } else if (this.semesterValue === '3rd Sem All Branch') {
        this.sem3Form = true;
        this.physicForm = false;
        this.chemistryForm = false;
        this.sem4Form = false;
        this.sem5Form = false;
        this.sem6Form = false;
        this.sem7_1Form = false;
        this.sem7_2Form = false;
        this.sem8Form = false;
    } else if (this.semesterValue === '4th Sem All Branch') {
        this.sem4Form = true;
        this.physicForm = false;
        this.chemistryForm = false;
        this.sem3Form = false;
        this.sem5Form = false;
        this.sem6Form = false;
        this.sem7_1Form = false;
        this.sem7_2Form = false;
        this.sem8Form = false;
    } else if (this.semesterValue === '5th Sem All Branch') {
        this.sem5Form = true;
        this.physicForm = false;
        this.chemistryForm = false;
        this.sem3Form = false;
        this.sem4Form = false;
        this.sem6Form = false;
        this.sem7_1Form = false;
        this.sem7_2Form = false;
        this.sem8Form = false;
    } else if (this.semesterValue === '6th Sem All Branch') {
        this.sem6Form = true;
        this.physicForm = false;
        this.chemistryForm = false;
        this.sem3Form = false;
        this.sem4Form = false;
        this.sem5Form = false;
        this.sem7_1Form = false;
        this.sem7_2Form = false;
    }
```

```

        this.sem8Form = false;
    } else if (this.semesterValue === '7th Sem CSE,ISE,ECE,EEE,CV') {
        this.sem7_1Form = true;
        this.physicForm = false;
        this.chemistryForm = false;
        this.sem3Form = false;
        this.sem4Form = false;
        this.sem5Form = false;
        this.sem6Form = false;
        this.sem7_2Form = false;
        this.sem8Form = false;
    } else if (this.semesterValue === '7th Sem E&C/E&E,Civil') {
        this.sem7_2Form = true;
        this.physicForm = false;
        this.chemistryForm = false;
        this.sem3Form = false;
        this.sem4Form = false;
        this.sem5Form = false;
        this.sem6Form = false;
        this.sem7_1Form = false;
        this.sem8Form = false;
    } else if (this.semesterValue === '8TH Sem All Branch') {
        this.sem8Form = true;
        this.physicForm = false;
        this.chemistryForm = false;
        this.sem3Form = false;
        this.sem4Form = false;
        this.sem5Form = false;
        this.sem6Form = false;
        this.sem7_1Form = false;
        this.sem7_2Form = false;
    }
},
Calc() {
    if (this.semesterValue === '1st & 2nd Physics Cycle') {

        this.aggregate = ( ((this.subjectCodes.scMAT11_21/10) *
this.physicsCycleCredits.pMAT11_21) + ((this.subjectCodes.scPHY12_22/10) *
this.physicsCycleCredits.pPHY12_22) + ((this.subjectCodes.scELE13_23/10) *
this.physicsCycleCredits.pELE13_23) + ((this.subjectCodes.scCIV14_24/10) *
this.physicsCycleCredits.pCIV14_24) + ((this.subjectCodes.scEGDL15_25/10) *
this.physicsCycleCredits.pEGDL15_25) + ((this.subjectCodes.scPHYL16_26/10) *
this.physicsCycleCredits.pPHYL16_26) + ((this.subjectCodes.scEEL17_27/10) *
this.physicsCycleCredits.pEEL17_27) + ((this.subjectCodes.scEGH18_28/10) *
this.physicsCycleCredits.pEGH18_28)) / (this.physicsCycleCredits.pMAT11_21 +
this.physicsCycleCredits.pEGH18_28 + this.physicsCycleCredits.pEEL17_27 +
this.physicsCycleCredits.pPHYL16_26 + this.physicsCycleCredits.pCIV14_24 +
this.physicsCycleCredits.pEGDL15_25 + this.physicsCycleCredits.pPHY12_22 +
this.physicsCycleCredits.pELE13_23);
        this.showResult = true;
    } else if (this.semesterValue === '1st & 2nd Chemistry Cycle') {

        this.aggregate = ( ((this.subjectCodes.scCMAT11_21/10) *

```

```

this.chemistryCycleCredits.cMAT11_21) + ((this.subjectCodes.scCHE12_22/10) *
this.chemistryCycleCredits.cCHE12_22) + ((this.subjectCodes.scCPS13_23/10) *
this.chemistryCycleCredits.cCPS13_23) + ((this.subjectCodes.scELN14_24/10) *
this.chemistryCycleCredits.cELN14_24) + ((this.subjectCodes.scME15_25/10) *
this.chemistryCycleCredits.cME15_25) + ((this.subjectCodes.scCHEL16_26/10) *
this.chemistryCycleCredits.cCHEL16_26) + ((this.subjectCodes.scCPL17_27/10) *
this.chemistryCycleCredits.cCPL17_27) + ((this.subjectCodes.scCEGH18_28/10) *
this.chemistryCycleCredits.cEGH18_28))/(this.chemistryCycleCredits.cMAT11_21 +
this.chemistryCycleCredits.cCPS13_23 + this.chemistryCycleCredits.cELN14_24 +
this.chemistryCycleCredits.cME15_25 + this.chemistryCycleCredits.cCHEL16_26 +
this.chemistryCycleCredits.cCPL17_27 + this.chemistryCycleCredits.cEGH18_28 +
this.chemistryCycleCredits.cCHE12_22);
    this.showResult = true;

} else if (this.semesterValue === '3rd Sem All Branch') {

    this.aggregate = ( ((this.subjectCodes.scMAT31/10) * this.sem3Credits.MAT31) +
((this.subjectCodes.scXX32/10) * this.sem3Credits.XX32) + ((this.subjectCodes.scXX33/10) *
this.sem3Credits.XX33) + ((this.subjectCodes.scXX34/10) * this.sem3Credits.XX34) +
((this.subjectCodes.scXX35/10) * this.sem3Credits.XX35) + ((this.subjectCodes.scXX36/10) *
this.sem3Credits.XX36) + ((this.subjectCodes.scXXL37/10) * this.sem3Credits.XXL37) +
((this.subjectCodes.scXXL38/10) * this.sem3Credits.XXL38) +
((this.subjectCodes.scCPC39_49/10) * this.sem3Credits.CPC39_49))/(this.sem3Credits.MAT31 +
this.sem3Credits.XX32 + this.sem3Credits.XX33 + this.sem3Credits.XX34 +
this.sem3Credits.XX35 + this.sem3Credits.XX36 + this.sem3Credits.XXL37 +
this.sem3Credits.XXL38 + this.sem3Credits.CPC39_49);
    this.showResult = true;

} else if (this.semesterValue === '4th Sem All Branch') {

    this.aggregate = ( ((this.subjectCodes.scMAT41/10) * this.sem4Credits.MAT41) +
((this.subjectCodes.scXX42/10) * this.sem4Credits.XX42) + ((this.subjectCodes.scXX43/10) *
this.sem4Credits.XX43) + ((this.subjectCodes.scXX44/10) * this.sem4Credits.XX44) +
((this.subjectCodes.scXX45/10) * this.sem4Credits.XX45) + ((this.subjectCodes.scXX46/10) *
this.sem4Credits.XX46) + ((this.subjectCodes.scXXL47/10) * this.sem4Credits.XXL47) +
((this.subjectCodes.scXXL48/10) * this.sem4Credits.XXL48) +
((this.subjectCodes.scC4PC39_49/10) *
this.sem4Credits.C4PC39_49))/(this.sem4Credits.MAT41 + this.sem4Credits.XX42 +
this.sem4Credits.XX43 + this.sem4Credits.XX44 + this.sem4Credits.XX45 +
this.sem4Credits.XX46 + this.sem4Credits.XXL47 + this.sem4Credits.XXL48 +
this.sem4Credits.C4PC39_49);
    this.showResult = true;

} else if (this.semesterValue === '5th Sem All Branch') {

    this.aggregate = ( ((this.subjectCodes.scXX51/10) * this.sem5Credits.XX51) +
((this.subjectCodes.scXX52/10) * this.sem5Credits.XX52) + ((this.subjectCodes.scXX53/10) *
this.sem5Credits.XX53) + ((this.subjectCodes.scXX54/10) * this.sem5Credits.XX54) +
((this.subjectCodes.scXX55/10) * this.sem5Credits.XX55) + ((this.subjectCodes.scXX56/10) *
this.sem5Credits.XX56) + ((this.subjectCodes.scXXL57/10) * this.sem5Credits.XXL57) +
((this.subjectCodes.scXXL58/10) * this.sem5Credits.XXL58) +
((this.subjectCodes.scENV_STUDIES/10) *
this.sem5Credits.ENV_STUDIES))/(this.sem5Credits.XX51 + this.sem5Credits.XX52 +
this.sem5Credits.XX53 + this.sem5Credits.XX54 + this.sem5Credits.XX55 +
this.sem5Credits.XX56 + this.sem5Credits.XXL57 + this.sem5Credits.XXL58 +
this.sem5Credits.ENV_STUDIES);

```

```

        this.showResult = true;

    } else if (this.semesterValue === '6th Sem All Branch') {

        this.aggregate = ( ((this.subjectCodes.scXX61/10) * this.sem6Credits.XX61) +
((this.subjectCodes.scXX62/10) * this.sem6Credits.XX62) + ((this.subjectCodes.scXX63/10)
* this.sem6Credits.XX63) + ((this.subjectCodes.scXX64/10) * this.sem6Credits.XX64) +
((this.subjectCodes.scXX65/10) * this.sem6Credits.XX65) + ((this.subjectCodes.scXX66/10)
* this.sem6Credits.XX66) + ((this.subjectCodes.scXXL67/10) * this.sem6Credits.XXL67) +
((this.subjectCodes.scXXMP68/10) * this.sem5Credits.XXMP68))/(this.sem6Credits.XX61 +
this.sem6Credits.XX62 + this.sem6Credits.XX63 + this.sem6Credits.XX64 +
this.sem6Credits.XX65 + this.sem6Credits.XX66 + this.sem6Credits.XXL67 +
this.sem6Credits.XXMP68);
        this.showResult = true;

    } else if (this.semesterValue === '7th Sem CSE,ISE,ECE,EEE,CV') {

        this.aggregate = ( ((this.subjectCodes.scCS71/10) * this.sem7ACredits.CS71) +
((this.subjectCodes.scCS72/10) * this.sem7ACredits.CS72) +
((this.subjectCodes.scCS73X/10) * this.sem7ACredits.CS73X) +
((this.subjectCodes.scCS74X/10) * this.sem7ACredits.CS74X) +
((this.subjectCodes.scCS75X/10) * this.sem7ACredits.CS75X) +
((this.subjectCodes.scCSL76/10) * this.sem7ACredits.CSL76) +
((this.subjectCodes.scCSP77/10) * this.sem7ACredits.CSP77) )/(this.sem7ACredits.CS71 +
this.sem7ACredits.CS72 + this.sem7ACredits.CS73X + this.sem7ACredits.CS74X +
this.sem7ACredits.CS75X + this.sem7ACredits.CSL76 + this.sem7ACredits.CSP77 );
        this.showResult = true;

    } else if (this.semesterValue === '7th Sem E&C/E&E,Civil') {

        this.aggregate = ( ((this.subjectCodes.scXX71/10) * this.sem7BCredits.XX71) +
((this.subjectCodes.scXX72/10) * this.sem7BCredits.XX72) +
((this.subjectCodes.scXX73X/10) * this.sem7BCredits.XX73X) +
((this.subjectCodes.scXX74X/10) * this.sem7BCredits.XX74X) +
((this.subjectCodes.scXX75X/10) * this.sem7BCredits.XX75X) +
((this.subjectCodes.scXXL76/10) * this.sem7BCredits.XXL76) +
((this.subjectCodes.scXXL77/10) * this.sem7BCredits.XXL77)
+((this.subjectCodes.scXXP78/10) * this.sem7BCredits.XXP78))/(this.sem7BCredits.XX71 +
this.sem7BCredits.XX72 + this.sem7BCredits.XX73X + this.sem7BCredits.XX74X +
this.sem7BCredits.XX75X + this.sem7BCredits.XXL76 + this.sem7BCredits.XXL77 +
this.sem7BCredits.XXP78 );
        this.showResult = true;

    } else if (this.semesterValue === '8TH Sem All Branch') {

        this.aggregate = (((this.subjectCodes.scXX81/10) * this.sem8Credits.XX81) +
((this.subjectCodes.scXX82X/10) * this.sem8Credits.XX82X) +
((this.subjectCodes.scXXP83/10) * this.sem8Credits.XXP83) +
((this.subjectCodes.scXXS84/10) * this.sem8Credits.XXS84) +
((this.subjectCodes.scXX185/10) * this.sem8Credits.XX185))/(this.sem8Credits.XX81 +
this.sem8Credits.XX82X + this.sem8Credits.XXP83 + this.sem8Credits.XXS84 +
this.sem8Credits.XX185);
        this.showResult = true;

    }

}

```

```
  ==  
}  
}  
</script>  
  
<style scoped>  
  
*{  
  margin: 0;  
  padding: 0;  
}  
  
.mainContainer{  
  width: 350px;  
  height: auto;  
  margin: 170px auto 30px;  
  border: 3px #86C232 solid;  
  border-radius: 10px;  
  padding: 20px;  
}  
  
.semSelector{  
  font-size: 27px;  
  font-weight: bold;  
  color: #86C232;  
  margin-bottom: 5px;  
}  
  
select{  
  padding: 5px;  
  font-size: 17px;  
  outline: none;  
  border: 2px solid #86C232;  
  margin-bottom: 10px;  
}  
  
button{  
  padding: 3px 10px;  
  font-size: 17px;  
  background: #222629;  
  border-radius: 5px;  
  color: #AAABB8;  
  border: 2px solid #86C232;  
  outline: none;  
}  
  
button:hover{  
  background: rgba(34, 38, 41, 0.51);  
}  
  
*{  
  margin: 0;  
  padding: 0;  
}  
  
.headContainer{
```

```


---



---

font-size: 27px;
font-weight: bold;
color: #86C232;
margin-bottom: 5px;
}

select{
  padding: 5px;
  font-size: 17px;
  outline: none;
  border: 2px solid #86C232;
  margin-bottom: 10px;
}

button{
  padding: 3px 10px;
  font-size: 17px;
  background: #222629;
  border-radius: 5px;
  color: #AAABB8;
  border: 2px solid #86C232;
  outline: none;
}
}

button:hover{
  background: rgba(97, 137, 47, 0.56);
}

input{
  margin-bottom: 10px;
  background-color: #222629;
  padding: 10px;
  border: none;
  width: 90%;
  color: #AAABB8;
  font-size: 19px;
  outline: none;
  border-radius: 5px;
}
}

.resultContainer{
  width: 100px;
  margin: 20px auto auto;
  color: #AAABB8;
}

.designedText{
  font-size: 40px;
  color: #86C232;
  font-weight: bold;
}
}

</style>
```

---

---

### FileName: cgpaCalculator\index.vue

```
<template>
<div class="mainContainer">
  <div class="cgpaCalculator">
    <p class="headContainer">Enter SGPA:</p>
    <form @submit.prevent="Calc">
      <input type="number" placeholder="1st Sem SGPA" v-
model="SemesterMarks.firstSemSGPA">
      <input type="number" placeholder="2nd Sem SGPA" v-
model="SemesterMarks.secondSemSGPA">
      <input type="number" placeholder="3rd Sem SGPA" v-
model="SemesterMarks.thirdSemSGPA">
      <input type="number" placeholder="4th Sem SGPA" v-
model="SemesterMarks.fourthSemSGPA">
      <input type="number" placeholder="5th Sem SGPA" v-
model="SemesterMarks.fifthSemSGPA">
      <input type="number" placeholder="6th Sem SGPA" v-
model="SemesterMarks.sixthSemSGPA">
      <input type="number" placeholder="7th Sem SGPA" v-
model="SemesterMarks.seventhSemSGPA">
      <input type="number" placeholder="8th Sem SGPA" v-
model="SemesterMarks.eighthSemSGPA">

      <div class="buttonContainer">
        <button type="submit">Calculate CGPA</button>
      </div>
    </form>
  </div>

  <div class="resultContainer" v-if="showResult">
    <p><span class="designedText">{{ this.SemesterMarks.aggregateCgpa.toFixed(1) }}</span> / 10.0</p>
  </div>

</div>
</template>

<script>
export default {
  name: "index",
  data(){
    return {
      SemesterMarks: {
        firstSemSGPA: 0,
        secondSemSGPA: 0,
        thirdSemSGPA: 0,
        fourthSemSGPA: 0,
        fifthSemSGPA: 0,
        sixthSemSGPA: 0,
        seventhSemSGPA: 0,
        eighthSemSGPA: 0,
        aggregateCgpa: 0,
      },
    }
  }
}
</script>
```

```
=====

showResult: false,
},
},
methods: {
Calc(){
    this.SemesterMarks.aggregateCgpa = ((this.SemesterMarks.firstSemSGPA/1 +
this.SemesterMarks.secondSemSGPA/1 + this.SemesterMarks.thirdSemSGPA/1 +
this.SemesterMarks.fourthSemSGPA/1 + this.SemesterMarks.fifthSemSGPA/1 +
this.SemesterMarks.sixthSemSGPA/1 + this.SemesterMarks.seventhSemSGPA/1 +
this.SemesterMarks.eighthSemSGPA/1)/8);
    this.showResult = true;
}
}
}
</script>

<style scoped>

*{
margin: 0;
padding: 0;
}

.mainContainer{
width: 350px;
height: auto;
margin: 170px auto 30px;
border: 3px #86C232 solid;
border-radius: 10px;
padding: 20px;
}

select{
padding: 5px;
font-size: 17px;
outline: none;
border: 2px solid #86C232;
margin-bottom: 10px;
}

button{
padding: 3px 10px;
font-size: 17px;
background: #222629;
border-radius: 5px;
color: #AAABB8;
border: 2px solid #86C232;
outline: none;
}

}
```

---

---

```
button:hover{
  background: rgba(97, 137, 47, 0.58);
}
```

```
*{
  margin: 0;
  padding: 0;
}
```

```
.headContainer{
  font-size: 27px;
  font-weight: bold;
  color: #86C232;
  margin-bottom: 5px;
}
```

```
select{
  padding: 5px;
  font-size: 17px;
  outline: none;
  border: 2px solid #86C232;
  margin-bottom: 10px;
}
```

```
button{
  padding: 3px 10px;
  font-size: 17px;
  background: #222629;
  border-radius: 5px;
  color: #AAABB8;
  border: 2px solid #86C232;
  outline: none;
}
```

```
button:hover{
  background: rgba(97, 137, 47, 0.56);
}
```

```
input{
  margin-bottom: 10px;
  background-color: #222629;
  padding: 10px;
  border: none;
  width: 90%;
  color: #AAABB8;
  font-size: 19px;
  outline: none;
  border-radius: 5px;
}
```

```
=====
```

```
.resultContainer{  
    width: 100px;  
    margin: 20px auto auto;  
    color: #AAABB8;  
}  
  
.designedText{  
    font-size: 40px;  
    color: #86C232;  
    font-weight: bold;  
}  
</style>
```

---

---

**File Name : middleware\authenticationVerifier.js**

```
import { Database } from '@/plugins/firebase';
import { getDoc, doc } from 'firebase/firestore';
export default async function ({store, route, redirect}){
  const currentUser = store.state.Authentication.user;
  const AuthenticatedRoutes = `/user\/*/g`;
  if(!currentUser && route.path.match(AuthenticatedRoutes)){
    redirect('/');
  }else if( currentUser && !route.path.match(AuthenticatedRoutes)){
    const currentUserDataSnapshot = await getDoc(doc(Database, "CSTUsersUID", currentUser.uid));
    if(currentUserDataSnapshot.exists()){
      redirect(`/user/${currentUserDataSnapshot.data().Username}`);
    }else {
      alert('Error');
    }
  }
}
```

---

---

### File Name: authentication\index.js

```
import { Authenticator } from '@/plugins/firebase';
import { signInWithEmailAndPassword, createUserWithEmailAndPassword } from
'firebase/auth'; import Cookie from 'js-cookie';

export const state = () => ({
user : null
});
export const mutations = {
SET_USER: (state, currentUser) => {
state.user = currentUser;
}
}
export const actions = {
async userSignUp({ commit }, UserCredentials){
try{

await createUserWithEmailAndPassword(Authenticator, UserCredentials.email,
UserCredentials.password);
const UserToken = await Authenticator.currentUser.getIdToken();
const { email, photoURL, emailVerified, uid } = Authenticator.currentUser;
Cookie.set('AccessToken', UserToken);
commit('SET_USER', { email, uid, emailVerified, photoURL});
}
catch (e) {
throw e;
}
},
async userSignIn({ commit }, UserCredentials){
try {
await signInWithEmailAndPassword(Authenticator, UserCredentials.email,
UserCredentials.password); const UserToken = await
Authenticator.currentUser.getIdToken();
const { email, uid, emailVerified, photoURL } = Authenticator.currentUser;
Cookie.set('AccessToken', UserToken);
commit('SET_USER', { email, uid, emailVerified, photoURL});
}
catch (e) {
throw e;
}
}
}
export const getters = { getCurrentUserID(state)
{
return state.user.uid;
}
}
```

---

---

**File Name: store\index.js**

```
import JWTDecoder from 'jwt-decode';
import CookieParser from 'cookieparser';
export const actions = {
  nuxtServerInit({ commit }, { req }) {
    if(process.server && process.static) return;
    if(!req.headers.cookie) return;
    const Parsed = CookieParser.parse(req.headers.cookie);
    const userAccessToken = Parsed.AccessToken;
    if(!userAccessToken) return;
    const Decoded = JWTDecoder(userAccessToken);
    if(Decoded) {
      commit('Authentication/SET_USER', {
        uid: Decoded.user_id,
        email : Decoded.email,
        emailVerified: Decoded.emailVerified,
        photoURL : Decoded.photoURL })
    }
  }
}
```

---

---

**File Name: UserUsername\index.js**

```
import { Database } from '@/plugins/firebase';
import { doc, getDoc } from 'firebase/firestore';
export const state = () => ({
  userUsername : null
});

export const mutations = {
  SET_USERUSERNAME : (state, userData) => {
    state.userUsername = userData
  }
};

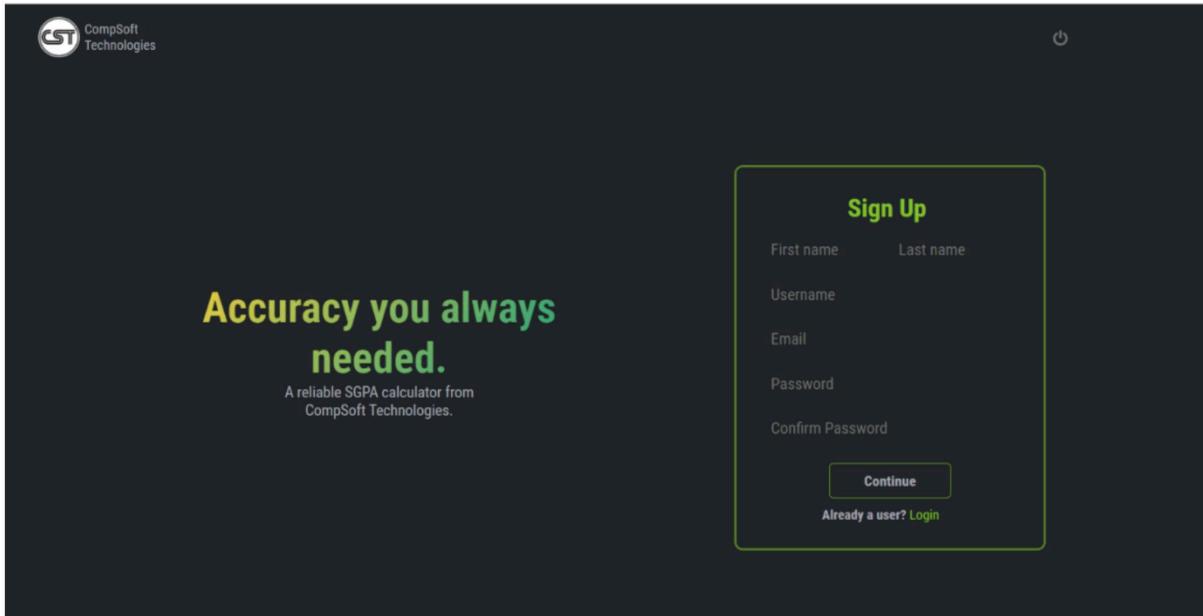
export const actions = {
  async getUserUsername({ commit }, currentUserUID){
    try{

      const userDataSnapshot = await getDoc(doc(Database, "CSTUsersUID", currentUserUID));
      if(userDataSnapshot.exists()){
        console.log(userDataSnapshot.data().Username);
        commit('SET_USERUSERNAME', userDataSnapshot.data().Username)
      }else {
        console.log("Error!!!!!!!");
      }
    }catch (e){
      throw e;
    }
  }
};

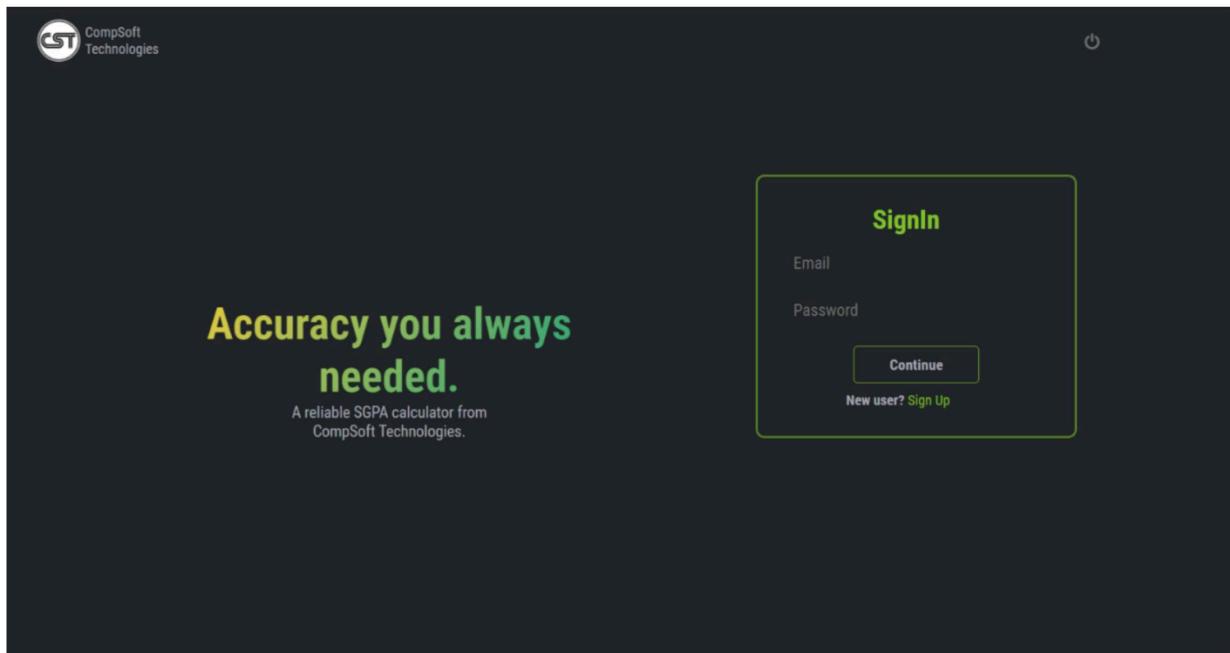
export const getters = {
  loadUserUsername(state){
    return state.userUsername;
  }
}
```

# SNAPSHOTS

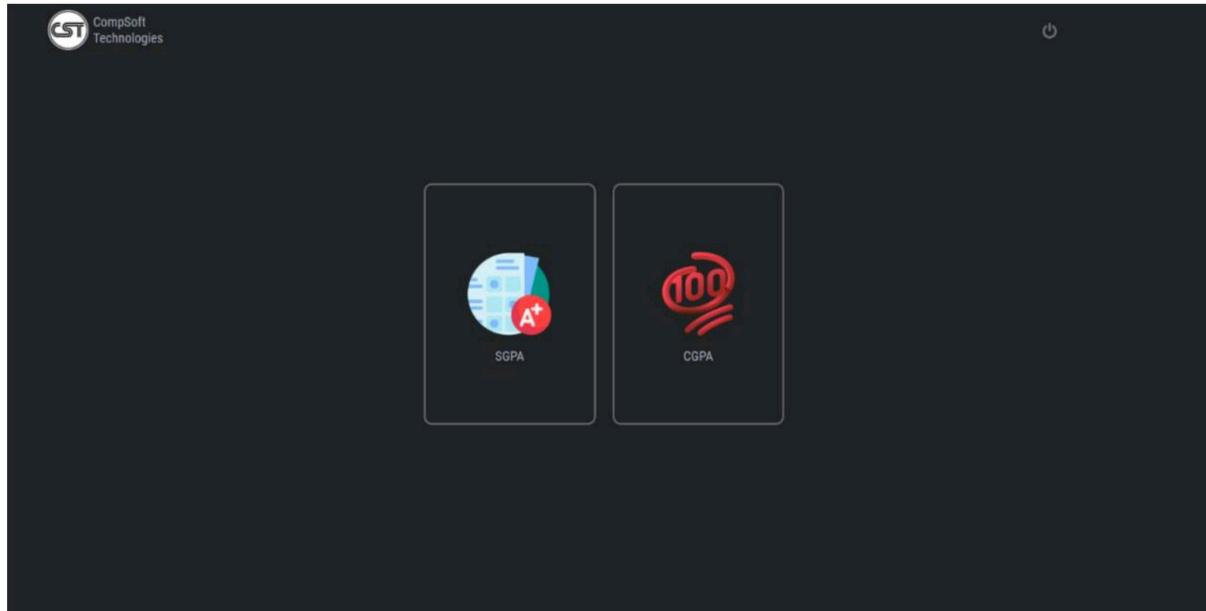
## HOME PAGE



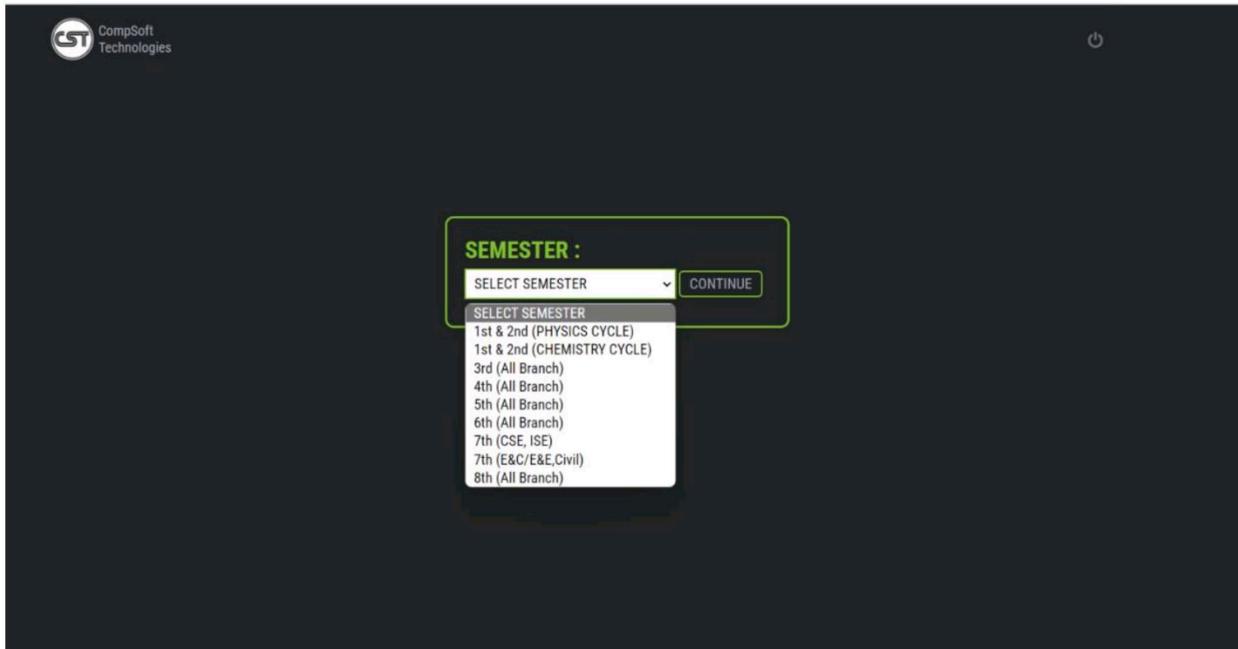
## SIGNIN PAGE



## PAGE TO CHOOSE CGPA/SGPA TO CALCULATE



## PAGE TO CHOOSE WHICH SEMESTER SGPA TO CALCULATE



PAGE TO ENTER DATA OF SEMESTER OF WHICH U WANT SGPA TO BE CALCULATED

**SEMESTER :**

1st & 2nd (PHYSICS CYCLE)

**Enter Marks:**

0  
0  
0  
0  
0  
0  
0  
0

## PAGE TO CALCULATE CGPA OF ALL SEMESTER

Enter SGPA:

0

0

0

0

0

0

0

0

0

## PAGE SHOWING CALCULATED SGPA RESULT

**SEMESTER :**

1st & 2nd (PHYSICS CYCLE)

**Enter Marks:**

99  
88  
89  
90  
80  
82  
83  
84

**8.9 / 10.0**

---

---

## PAGE SHOWING CALCULATED CGPA RESULT

**Enter SGPA:**

9  
8  
7  
8  
9  
6  
7  
9

**7.9** / 10.0

---

---

## BIBLIOGRAPHY

- <https://www.w3schools.com>
- <https://www.geeksforgeeks.org>
- <https://css-tricks.com/>
- [https://www.takeiteeasyengineers.com](https://www.takeiteasyengineers.com)