

INNOVATE. CREATE. SOLVE

Bengaluru, Karnataka, India



innovation.creation

AN INTERNSHIP REPORT

ON

“VTU SGPA CALCULATOR”

Bachelor of Engineering

In

Computer Science and Engineering

Submitted by: VIDHI .BALDAWA(3VC18CS165)
CH SRIJA(3VC18CS028)



COLLEGE-NAME:

**Rao Bahadur Y Mahabaleshwarrappa Engineering College
2021**

ABOUT THE COMPANY

IC Solution (ICS) is a digital service provider that aims to provide software, designing and marketing solutions to individuals and businesses. At ICS, 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 startup 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.

TABLE OF CONTENTS

- Overview of the project
- Tools Used
- Implementation
- Snapshots
- Bibliography

OVERVIEW OF THE PROJECT

Project Name: VTU SGPA CALCULATOR

Team Members: 1. VIDHI .BALDAWA

2. CH SRIJA

This project is based on Web Development And its Applications. The main objective of this project is to learn the implementation of HTML, CSS, JavaScript, MYSQL, PHP. The basic webpage of this project is created using HTML , styling of the webpage is done using CSS , for the logical requirements we use JS , MYSQL database for managing data entered by the user and PHP server ,XAMPP.

This webpage is of calculating SGPA and CGPA calculator.

The website is easy to use and is user-friendly. It is compatible with mobile phones and other devices. Also, the data of the user is completely secured and he can make an account and set their password to access their account at any point of time.

TOOLS USED

Software Requirements:

- Visual Studio Code2019.
- Google Chrome or Microsoft Edge of latest version.
- Front End: HTML,CSS,JS(optional)
- Linux 7.1 or Windows XP/7/8/10OS or Mac OS
- PHP server-XAMPP, WAMP, etc.
- MySQL Database

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).

IMPLEMENTATION

Source Code:

```
<!DOCTYPE html> <html>

<head> <meta charset="utf-8"> <link rel="stylesheet" type="text/css" href="styles.css"> <title>Center for Health Information Technology</title>
<script type="text/javascript">
function calculate()
{
    var x=document.getElementById("result1").value;
    var y=document.getElementById("result2").value;
    var z=document.getElementById("result3").value;
    var a=document.getElementById("result4").value;
    var result1=parseFloat(x) + parseFloat(y) + parseFloat(z)
        + parseFloat(a); // conversion to numbers; this is necessary for +, other operators will automatically convert
    var result5=x%y;

    //build a string first and then display it all together.
    //don't forget HTML tags in your output!

    var html=<p>Your GPA is: "+result1/4+"</p>";

    document.getElementById("total").innerHTML=html;
}

</script>
</head>

<body>

<h1 style="text-align: center;background-color: black;color: blanchedalmond;padding: 10px;">VTU SGPA AND CGPA CALCULATOR</h1>
```

```
<script language="JavaScript">

function calculateGpa (form) {
    var gpa = form.gpa1.value;

    if (gpa == "A") {
        gpa = 4;
    }
    if (gpa == "B") {
        gpa = 3;
    }
    if (gpa == "C") {
        gpa = 2;
    }
    if (gpa == "D") {
        gpa = 1;
    }
    if (gpa == "F") {
        gpa = 0;
    }
    if (gpa == "a") {
        gpa = 4;
    }
    if (gpa == "b") {
        gpa = 3;
    }
    if (gpa == "c") {
        gpa = 2;
    }
    if (gpa == "d") {
        gpa = 1;
    }
    if (gpa == "f") {
        gpa = 0;
    }
    document.getElementById("result1").innerHTML = gpa;
}
</script>

<body>

<form action="" id="it3503">Enter your grade in the form of a letter grade for class IT 3503:<br>
```

```
<input type="text" name="gpa1" value="">
<input type="button" name="button" value="Calculate" onClick="calculateGpa(this.form)">
</form>
<div id="result1"></div>

<script language="JavaScript">

function calculateGpa2 (form) {
    var gpa = form.gpa2.value;

        if (gpa == "A") {
            gpa = 4;
        }
        if (gpa == "B") {
            gpa = 3;
        }
        if (gpa == "C") {
            gpa = 2;
        }
        if (gpa == "D") {
            gpa = 1;
        }
        if (gpa == "F") {
            gpa = 0;
        }
        if (gpa == "a") {
            gpa = 4;
        }
        if (gpa == "b") {
            gpa = 3;
        }
        if (gpa == "c") {
            gpa = 2;
        }
        if (gpa == "d") {
            gpa = 1;
        }
        if (gpa == "f") {
            gpa = 0;
        }
    document.getElementById("result2").innerHTML = gpa;
}
</script>
```

```
<body>

<form action="" id="it4153">Enter your grade in the form of a letter g
rade for class IT 4153:<br>

<input type="text" name="gpa2" value="">
<input type="button" name="button" value="Calculate" onClick="calculat
eGpa2(this.form)">
</form>
<div id="result2"></div>

<script language="JavaScript">
function calculateGpa3 (form) {
    var gpa = form.gpa3.value;

        if (gpa == "A") {
            gpa = 4;
        }
        if (gpa == "B") {
            gpa = 3;
        }
        if (gpa == "C") {
            gpa = 2;
        }
        if (gpa == "D") {
            gpa = 1;
        }
        if (gpa == "F") {
            gpa = 0;
        }
        if (gpa == "a") {
            gpa = 4;
        }
        if (gpa == "b") {
            gpa = 3;
        }
        if (gpa == "c") {
            gpa = 2;
        }
        if (gpa == "d") {
            gpa = 1;
        }
}
```

```
        if (gpa == "f") {
            gpa = 0;
        }
        document.getElementById("result3").innerHTML = gpa;
    }
</script>

<body>

<form action="" id="it5443">Enter your grade in the form of a letter grade for class IT 5443:<br>

<input type="text" name="gpa3" value="">
<input type="button" name="button" value="Calculate" onClick="calculateGpa3(this.form)">
</form>
<div id="result3"></div>

<script language="JavaScript">
function calculateGpa4(form) {
    var gpa = form.gpa4.value;

        if (gpa == "A") {
            gpa = 4;
        }
        if (gpa == "B") {
            gpa = 3;
        }
        if (gpa == "C") {
            gpa = 2;
        }
        if (gpa == "D") {
            gpa = 1;
        }
        if (gpa == "F") {
            gpa = 0;
        }
        if (gpa == "a") {
            gpa = 4;
        }
        if (gpa == "b") {
            gpa = 3;
        }
}
```

```
        if (gpa == "c") {
            gpa = 2;
        }
        if (gpa == "d") {
            gpa = 1;
        }
        if (gpa == "f") {
            gpa = 0;
        }
        document.getElementById("result4").innerHTML = gpa;

    }
</script>

<body>

<form action="" id="it5413">Enter your grade in the form of a letter grade for class IT 5413:<br>

<input type="text" name="gpa4" value="">
<input type="button" name="button" value="Calculate" onClick="calculateGpa4(this.form)">
</form>
<div id="result4"></div>
<br>
<input type="button" id="final" name="button" value="Calculate" onClick="calculate()">

<script type="text/javascript">
    function calculate()
    {
        var x=document.getElementById("result1").value;
        var y=document.getElementById("result2").value;
        var z=document.getElementById("result3").value;
        var a=document.getElementById("result4").value;
        var result1=parseFloat(x) + parseFloat(y) + parseFloat(z)
        + parseFloat(a); // conversion to numbers; this is necessary for +, other operators will automatically convert
        var result5=x%y;

        //build a string first and then display it all together.
        //don't forget HTML tags in your output!
    }
</script>
```

```
var html=<p>Your GPA is: "+result1/4+"</p>;

        document.getElementById("total").innerHTML=html;
    }

</script>

<div id="total"></div>
<br><br><br><br><br> <br><br><br><br><br><br><br>
<div id="result"></div>

<Crs>
<FORM Name="GPACalcForm">
<TABLE BORDER=5 BGCOLOR=#C0C0C0 CELLPADDING="5"
CELLSPACING="2">
<TH></TH>
<TH>Grade</TH>
<TH>Credits</TH>
<TR>
<TD>Class 1</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR1" ALIGN=TOP
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR1" ALIGN=TOP
MAXLENGTH=5></TD>
</TR>
<TR>
<TD>Class 2</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR2" ALIGN=TOP
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR2" ALIGN=TOP
MAXLENGTH=5></TD>
```

```
</TR>
<TR>
<TD>Class 3</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR3" ALIGN=TOP  
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR3" ALIGN=TOP  
MAXLENGTH=5></TD>
</TR>
<TR>
<TD>Class 4</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR4" ALIGN=TOP  
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR4" ALIGN=TOP  
MAXLENGTH=5></TD>
</TR>
<TR>
<TD>Class 5</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR5" ALIGN=TOP  
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR5" ALIGN=TOP  
MAXLENGTH=5></TD>
</TR>
<TR>
<TD>Class 6</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR6" ALIGN=TOP  
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR6" ALIGN=TOP  
MAXLENGTH=5></TD>
</TR>
<TR>
<TD>Class 7</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR7" ALIGN=TOP  
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR7" ALIGN=TOP  
MAXLENGTH=5></TD>
</TR>
<TR>
<TD>Class 8</TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="GR8" ALIGN=TOP  
MAXLENGTH=5></TD>
<TD><INPUT TYPE=TEXT SIZE=5 NAME="CR8" ALIGN=TOP  
MAXLENGTH=5></TD>
</TR>
<TR ALIGN=CENTER>
<TD COLSPAN=3><INPUT TYPE="BUTTON" VALUE="Calculate"
```

```
NAME="CalcButton"
OnClick="gpacalc()"></TD>
</TR>
</TABLE>
</FORM>
<BR>
<P>

<P>
</CENTER>

<BR>

<SCRIPT LANGUAGE="JavaScript">

<!--
function gpacalc()
{
//define valid grades and their values
var gr = new Array(9);
var cr = new Array(9);
var ingr = new Array(5);
var incr = new Array(5);

// define valid grades and their values
var grcount = 11;
gr[0] = "A+";
cr[0] = 5;
gr[1] = "A";
cr[1] = 4;
gr[2] = "A-";
cr[2] = 3.66;
gr[3] = "B+";
cr[3] = 3.33;
gr[4] = "B";
cr[4] = 3;
gr[5] = "B-";
cr[5] = 2.66;
gr[6] = "C+";
cr[6] = 2.33;
gr[7] = "C";
cr[7] = 2;
gr[8] = "C-";
cr[8] = 1.66;
```

```

gr[9] = "D";
cr[9] = 1;
gr[10] = "F";
cr[10] = 0;
// retrieve user input
ingr[0] = document.GPACalcForm.GR1.value;
ingr[1] = document.GPACalcForm.GR2.value;
ingr[2] = document.GPACalcForm.GR3.value;
ingr[3] = document.GPACalcForm.GR4.value;
ingr[4] = document.GPACalcForm.GR5.value;
ingr[5] = document.GPACalcForm.GR6.value;
ingr[6] = document.GPACalcForm.GR7.value;
ingr[7] = document.GPACalcForm.GR8.value;
incr[0] = document.GPACalcForm.CR1.value;
incr[1] = document.GPACalcForm.CR2.value;
incr[2] = document.GPACalcForm.CR3.value;
incr[3] = document.GPACalcForm.CR4.value;
incr[4] = document.GPACalcForm.CR5.value;
incr[5] = document.GPACalcForm.CR6.value;
ingr[6] = document.GPACalcForm.GR7.value;
ingr[7] = document.GPACalcForm.GR8.value;

// Calculate GPA
var allgr =0;
var allcr = 0;
var gpa = 0;
for (var x = 0; x < 5 + 3; x++)
{
    if (ingr[x] == "") break;
    // if (isNaN(parseInt(incr[x]))) alert("Error-
You did not enter a numeric credits value for Class If the class is
worth 0 credits then enter the number 0 in the field.");
    var validgrcheck = 0;
    for (var xx = 0; xx < grcount; xx++)
    {
        if (ingr[x] == gr[xx])
        {
            allgr = allgr + (parseInt(incr[x],10) * cr
[xx]);
            allcr = allcr + parseInt(incr[x],10);
            validgrcheck = 1;
            break;
        }
    }
    if (validgrcheck == 0)

```

```
        {
            alert("Error-
Could not recognize the grade entered for Class " + eval(x + 1) + ".
Please use standard college grades in the form of A A- B+ ...F.");
            return 0;
        }
    }

// this if-check prevents a divide by zero error
if (allcr == 0)
{
    alert("Error-
You did not enter any credit values! GPA = N/A");
    return 0;
}

gpa = allgr / allcr;

alert("GPA =  " + eval(gpa));

return 0;
}

//-->

</SCRIPT>

</body>

</html>
```

SOURCE CODE (HTML): REGISTRATION FORM

```
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <title>Login and Registration Form </title>
    <link rel="stylesheet" href="registration.css">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <div class="wrapper">
      <div class="title-text">
        <div class="title login">
          Login Form
        </div>
        <div class="title signup">
          Signup Form
        </div>
      </div>
      <div class="form-container">
        <div class="slide-controls">
          <input type="radio" name="slide" id="login" checked>
          <input type="radio" name="slide" id="signup">
          <label for="login" class="slide login">Login</label>
          <label for="signup" class="slide signup">Signup</label>
          <div class="slider-tab"></div>
        </div>
        <div class="form-inner">
          <form action="#" class="login">
            <div class="field">
              <input type="text" placeholder="Email Address" required>
            </div>
            <div class="field">
              <input type="password" placeholder="Password" required>
            </div>
            <div class="pass-link">
              <a href="#">Forgot password?</a>
            </div>
            <div class="field btn">
              <div class="btn-layer"></div>
              <input type="submit" value="Login">
            </div>
            <div class="signup-link">
              <a href="#">Create account</a>
            </div>
          </form>
        </div>
      </div>
    </div>
  </body>
</html>
```

```
        Not a member? <a href="">Signup now</a>
    </div>
</form>
<form action="#" class="signup">
    <div class="field">
        <input type="text" placeholder="Email Address" required>
    </div>
    <div class="field">
        <input type="password" placeholder="Password" required>
    </div>
    <div class="field">
        <input type="password" placeholder="Confirm password" re
quired>
    </div>
    <div class="field btn">
        <div class="btn-layer"></div>
        <input type="submit" value="Signup">
    </div>
</form>
</div>
</div>
</script>
const loginText = document.querySelector(".title-text .login");
const loginForm = document.querySelector("form.login");
const loginBtn = document.querySelector("label.login");
const signupBtn = document.querySelector("label.signup");
const signupLink = document.querySelector("form .signup-link a");
signupBtn.onclick = (()=>{
    loginForm.style.marginLeft = "-50%";
    loginText.style.marginLeft = "-50%";
});
loginBtn.onclick = (()=>{
    loginForm.style.marginLeft = "0%";
    loginText.style.marginLeft = "0%";
});
signupLink.onclick = (()=>{
    signupBtn.click();
    return false;
});
</script>
</body>
</html>
```

SOURCE CODE (CSS): REGISTRATION FORM

```
@import url('https://fonts.googleapis.com/css?family=Poppins:400,500,600,700&display=swap');

*{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    font-family: 'Poppins', sans-serif;
}

html,body{
    display: grid;
    height: 100%;
    width: 100%;
    place-items: center;
    background: -webkit-linear-gradient(left, #3c4245,white);
}

::selection{
    background: #fa4299;
    color: #fff;
}

.wrapper{
    overflow: hidden;
    max-width: 390px;
    background: #fff;
    padding: 30px;
    border-radius: 5px;
    box-shadow: 0px 15px 20px rgba(0,0,0,0.1);
}

.wrapper .title-text{
    display: flex;
    width: 200%;
}

.wrapper .title{
    width: 50%;
    font-size: 35px;
    font-weight: 600;
    text-align: center;
    transition: all 0.6s cubic-bezier(0.68,-0.55,0.265,1.55);
}

.wrapper .slide-controls{
    position: relative;
    display: flex;
```

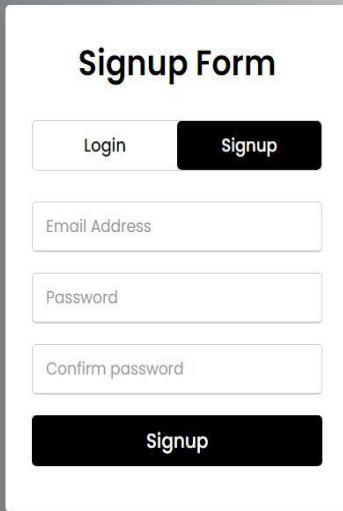
```
height: 50px;
width: 100%;
overflow: hidden;
margin: 30px 0 10px 0;
justify-content: space-between;
border: 1px solid lightgrey;
border-radius: 5px;
}
.slide-controls .slide{
height: 100%;
width: 100%;
color: #fff;
font-size: 18px;
font-weight: 500;
text-align: center;
line-height: 48px;
cursor: pointer;
z-index: 1;
transition: all 0.6s ease;
}
.slide-controls label.signup{
color: #000;
}
.slide-controls .slider-tab{
position: absolute;
height: 100%;
width: 50%;
left: 0;
z-index: 0;
border-radius: 5px;
background: black;
transition: all 0.6s cubic-bezier(0.68,-0.55,0.265,1.55);
}
input[type="radio"]){
display: none;
}
#signup:checked ~ .slider-tab{
left: 50%;
}
#signup:checked ~ label.signup{
color: #fff;
cursor: default;
user-select: none;
}
#signup:checked ~ label.login{
```

```
    color: #000;
}
#login:checked ~ label.signup{
    color: #000;
}
#login:checked ~ label.login{
    cursor: default;
    user-select: none;
}
.wrapper .form-container{
    width: 100%;
    overflow: hidden;
}
.form-container .form-inner{
    display: flex;
    width: 200%;
}
.form-container .form-inner form{
    width: 50%;
    transition: all 0.6s cubic-bezier(0.68,-0.55,0.265,1.55);
}
.form-inner form .field{
    height: 50px;
    width: 100%;
    margin-top: 20px;
}
.form-inner form .field input{
    height: 100%;
    width: 100%;
    outline: none;
    padding-left: 15px;
    border-radius: 5px;
    border: 1px solid lightgrey;
    border-bottom-width: 2px;
    font-size: 17px;
    transition: all 0.3s ease;
}
.form-inner form .field input:focus{
    border-color: #3c4245;
    /* box-shadow: inset 0 0 3px #fb6aae; */
}
.form-inner form .field input::placeholder{
    color: #999;
    transition: all 0.3s ease;
}
```

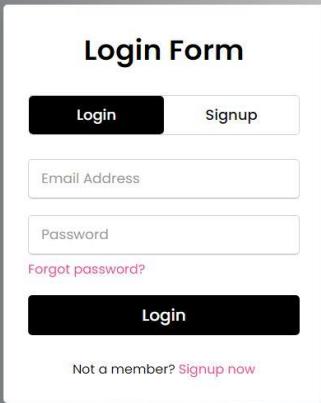
```
form .field input:focus::placeholder{
  color: #b3b3b3;
}
.form-inner form .pass-link{
  margin-top: 5px;
}
.form-inner form .signup-link{
  text-align: center;
  margin-top: 30px;
}
.form-inner form .pass-link a,
.form-inner form .signup-link a{
  color: #fa4299;
  text-decoration: none;
}
.form-inner form .pass-link a:hover,
.form-inner form .signup-link a:hover{
  text-decoration: underline;
}
form .btn{
  height: 50px;
  width: 100%;
  border-radius: 5px;
  position: relative;
  overflow: hidden;
}
form .btn .btn-layer{
  height: 100%;
  width: 300%;
  position: absolute;
  left: -100%;
  background: black;
  border-radius: 5px;
  transition: all 0.4s ease;;
}
form .btn:hover .btn-layer{
  left: 0;
}
form .btn input[type="submit"]){
  height: 100%;
  width: 100%;
  z-index: 1;
  position: relative;
  background: none;
  border: none;
```

```
color: #fff;  
padding-left: 0;  
border-radius: 5px;  
font-size: 20px;  
font-weight: 500;  
cursor: pointer;  
}
```

Snapshots :



A screenshot of a mobile application's "Signup Form". The form is contained within a white rectangular box with rounded corners. At the top center, the text "Signup Form" is displayed in a bold, black, sans-serif font. Below this, there are three input fields: "Email Address", "Password", and "Confirm password", each enclosed in a light gray rectangular box. At the bottom of the form is a large, solid black rectangular button with the word "Signup" centered in white text.



A screenshot of a mobile application's "Login Form". The form is contained within a white rectangular box with rounded corners. At the top center, the text "Login Form" is displayed in a bold, black, sans-serif font. Below this, there are two input fields: "Email Address" and "Password", each enclosed in a light gray rectangular box. To the right of the "Email Address" field is a small, faint link "Forgot password?". At the bottom of the form is a large, solid black rectangular button with the word "Login" centered in white text. Below the "Login" button, there is a small, faint link "Not a member? [Signup now](#)". Above the "Login" button, there are two smaller buttons: a black one labeled "Login" and a white one labeled "Signup".

VTU SGPA AND CGPA CALCULATOR

Enter your grade in the form of a letter grade for class IT 3503:

Enter your grade in the form of a letter grade for class IT 4153:

Enter your grade in the form of a letter grade for class IT 5443:

Enter your grade in the form of a letter grade for class IT 5413:

| | Grade | Credits |
|--|----------------------|----------------------|
| Class 1 | <input type="text"/> | <input type="text"/> |
| Class 2 | <input type="text"/> | <input type="text"/> |
| Class 3 | <input type="text"/> | <input type="text"/> |
| Class 4 | <input type="text"/> | <input type="text"/> |
| Class 5 | <input type="text"/> | <input type="text"/> |
| Class 6 | <input type="text"/> | <input type="text"/> |
| Class 7 | <input type="text"/> | <input type="text"/> |
| Class 8 | <input type="text"/> | <input type="text"/> |
| <input type="button" value="Calculate"/> | | |

BIBLIOGRAPHY

- <https://www.w3schools.com>
- <https://www.geeksforgeeks.org>
- <https://freefrontend.com>

About my Team

TEAM NAME: vi-sr

TEAM MEMBERS: VIDHI.BALDAWA (3VC18CS165)
CH SRIJA (3VC18CS028)

We were able to complete this project through a good communication among us and team work .we have first planned and gathered the requirements that are needed .we have divided the work into small parts and executed each part one by one by giving ourselves a deadline . First we completed the frontend part and later the database and the backend. We were able to complete the project in the given time.

Thank you.