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Software Development Project (SDP)

On

Dashboard Menu Design

By

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Dashboard Menu Design

Abstract:

Now a days, it is important to manage all the important things at a place. Also, it is general practice of a human being to keep such things in cupboard or wallet. Same rule can be applied to the technological facts. As we see various websites, all the information regarding that firm or the institution is accommodated in a single dashboard. This mechanism of dashboard is done by using various tabs in a single screen. In this software development project named 'Dashboard Menu Design', I have tried to implement the concept of the dashboard which can be used for academic purposes. In this project, various tabs such as academic status, accounts, profile, grades, subjects, marks, etc. are included so that it will be easy to access all the detailed information of any student at any time to the institute. This dashboard will be comparing with our college website dashboard so that there will be slight idea about the further development of the dashboard. For the security purpose, I have also implemented the login and password function so that one can be trustful with this software development project. The programming languages used for this project are Hyper Text Markup Language (HTML) which is used to format the dashboard primary design and JavaScript, which is used for implementing some features. HTML is the language for describing the structure of Web pages. HTML gives authors the means to: Publish online documents with headings, text, tables, lists, photos, etc. Retrieve online information via hypertext links, at the click of a button. For editing purpose, I have used Cascading Style Sheet (CSS). It was used to give some aesthetic appearance to the dashboard and to make it attractive for good user impression and retention. GitHub is used to host the project and showcase it. The IDE used for this hole project is VCS (Visual Code Studio) software.

Keywords: Dashboard, Software, HTML, JavaScript, CSS, VCS, Education, Project, Code.

Executive Summary.....

Objectives:

1. To design a dashboard which will be easy to handle and understand.
2. To avoid the usage of complicated dashboard designs to overcome the confusion.
3. To tackle the basic need of institutions for management of students and their classes along with their documentation.
4. To make an effective as well as easy platform to reach to students.
5. To develop a low cost project for various educational organizations.
6. To make one application for mobile for the same dashboard.

Goals:

1. To do development of the project for on field usage as per the need.
2. Customize the project as per the requirements of the customers and users.
3. To add more tabs and information in project so it will be a packed set of information container of students.
4. To develop the aesthetic view of the dashboard.
5. To reach to maximum cloud for use and feedback.

Strategy:

1. Recognition of problem and difficulty of current dashboard of any educational institute.
2. Searching for various alternatives to solve the problem.
3. Choosing one of the alternative best suited to tackle the need and problem.
4. Deep thinking and thoughtful analysis of the solution for solving the problem.
5. Choosing the software and tools to create the solution.
6. Gathering of information and then analyzing it.
7. Inclusion of the needed information in the code as solution.
8. Finalization of solution i.e. dashboard Menu Design.

Literature Survey-

There are large number of institutional website which contains all the information of academic of students. These websites also contain some academic information such as time table of classes, accounts of students, exam results, attendance and many more things. But, in this project I tried to implement the same purpose for the educational institute's websites. There is some development in the dashboard of these websites. After visiting too many of the websites and looking to their dashboard which there at the first sight of the user, it looks very complicated some time to find the particular tab and the certain task. Though there are many designs of the dashboards are available now days, this project tried to implement the dashboard in easy as well as low cost way. Also, in some of the already designs of the dashboards for academic purposes it is quite difficult to navigate from one tab to another. The one more issue with that is user have to find the assignment due dates, time for the classes, user doesn't know the objective of the particular class which going to be held, time table for the upcoming days in one sight as soon as the dashboard opens when the website is clicked. To fix the issue, this project of Dashboard Menu Design takes care of displaying only the necessary information such as upcoming lectures, today's classes, messages from faculty, assignment due dates, etc. Hence, it makes easier and takes a short time to visit the dashboard and recognize the tasks which are necessary to complete. For the future scope, this project can include the alarm system which are already available ,but they are used for another applications. This system can be implemented for the purpose to notify the particular student or teachers about the lectures or any messages. Some of the dashboards visited for the literature review purpose are the website of Vishwakarma Institute of technology, College of Engineering Pune, Indian Institute of Technology, Mumbai, AISSMS college of Engineering, Pune, etc. and then I designed the Dashboard menu Design project.

Introduction:

1. Student's Dashboard

'Dashboard Menu Design' is the design of dashboard for student as well as institute use. This project includes the dashboard which will contain all the necessary information about the student. The dashboard will contain the tab named Classes which will show all the information about the timetable of the particular class of the students. The next tab is General info. This tab contains the basic information about the student such as address, contact info, family background, skills, educational status, personal information, etc. This can be updated in the course of time. Notifications named tab is the next tab which intimates the user about the task to be done. The visualization of this dashboard on various devices such as mobiles of different brands or desktops can be done using chrome browser.

2. HTML and Dashboard Design

Hyper Text Markup Language (HTML) is a mark-up language for creating a webpage. In easier words, HTML is a kind of programming language that can make a new webpage. WebPages are usually viewed in a web browser. They can include writing, links, pictures, and even sound and video. HTML is used to mark and describe each of these kinds of content so the web browser can display them correctly. HTML also adds meta information to a webpage. Meta information is usually not shown by web browsers and is data about the web page, e.g., the name of the person who created the page. HTML is made by the World Wide Web Consortium (W3C). There are several versions of HTML. As of September 2018, the current standard of HTML is dubbed HTML 5, is specifically at version 5.2 and the same is used in this Dashboard Design project.

3. JavaScript

JavaScript is a lightweight, interpreted, object-oriented language with first-class functions, and is best known as the scripting language for Web pages, but it's used in many non-browser environments as well. It is a prototype-based, multi-paradigm scripting language that is dynamic, and supports object-oriented, imperative, and functional programming styles. JavaScript runs on the client side of the web, which can be used to design / program how the web pages behave on the occurrence of an event. JavaScript is an easy to learn and also powerful scripting language, widely used for controlling web page behavior.

4. CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

Panes and contents:

- **Login Page**

The provision of Login ID and Password is given in the project to keep the student's account secure and safe. This will make the project more trustworthy for practical use. Also, the system for hiding the password is provided to make it safer. As soon as the user enters the application or visits the website, it opens the login page where it asks to enter the Login ID and password.

- **Dashboard**

1. Navigation Bar

In the navigation bar which will be located at left side of our dashboard, there are navigation buttons showing Dashboard, Classes, Download Docs, Any Query and Project info. At the very bottom of the panel, there is option for logging out of the dashboard. The Dashboard option inculcates the information about the courses to be registered, messages from the faculty, etc. This will be the main interface for the user that all the important and necessary information will be displayed in Dashboard option. In the Classes tab, it will briefly show the timetable of the particular student's class and practicals and tutorials. The Download Docs tab will contain the documents which are uploaded by faculty for academic purposes and accessible to the students. Any Query option is provided there for users which will help them to solve their doubts about the course. The last one is the project info which gives the information about this SDP project.

2. Profile and Due Dates

The right most panel on the dashboard contains the profile photo of the student and some basic information of particular student which can be updated student to student. Below the profile, there is timetable for the upcoming lectures. It will intimate the user to prepare for the lecture which is being displayed on the bar. Below the timetable, there is a section for assignments which are to be submitted. This section also shows the due date for submission of assignment.

3. Display Pan

This pane is only designed for the purpose of displaying various navigation tabs. It also contains the messages received from the faculty.

- i. **Dashboard**

Dashboard contains all the information which is to be completed in upcoming few days. Also, it contains the message box to convey the messages sent by faculties.

- ii. **Classes**

In classes, this project contains six representative windows for courses that students have registered. Also, it shows the objective of the course on its window so that it will create ease to students for registering.

iii. Download docs

This option contains the documents which are important for students to be downloaded. It can also be used by faculty to upload some documents like lecture notes.

iv. Any Query

This is the forum where students can interact with teachers about the academic doubts as well as institutional problems. Such tabs can also be used for interacting with the owner of the project. Hence, the purpose is fully depend on user.

v. Project Info

This tab is provided to convey the information about the project. This includes the power point presentation as well as report of the project which is encrypted. It will be accessible only by password.

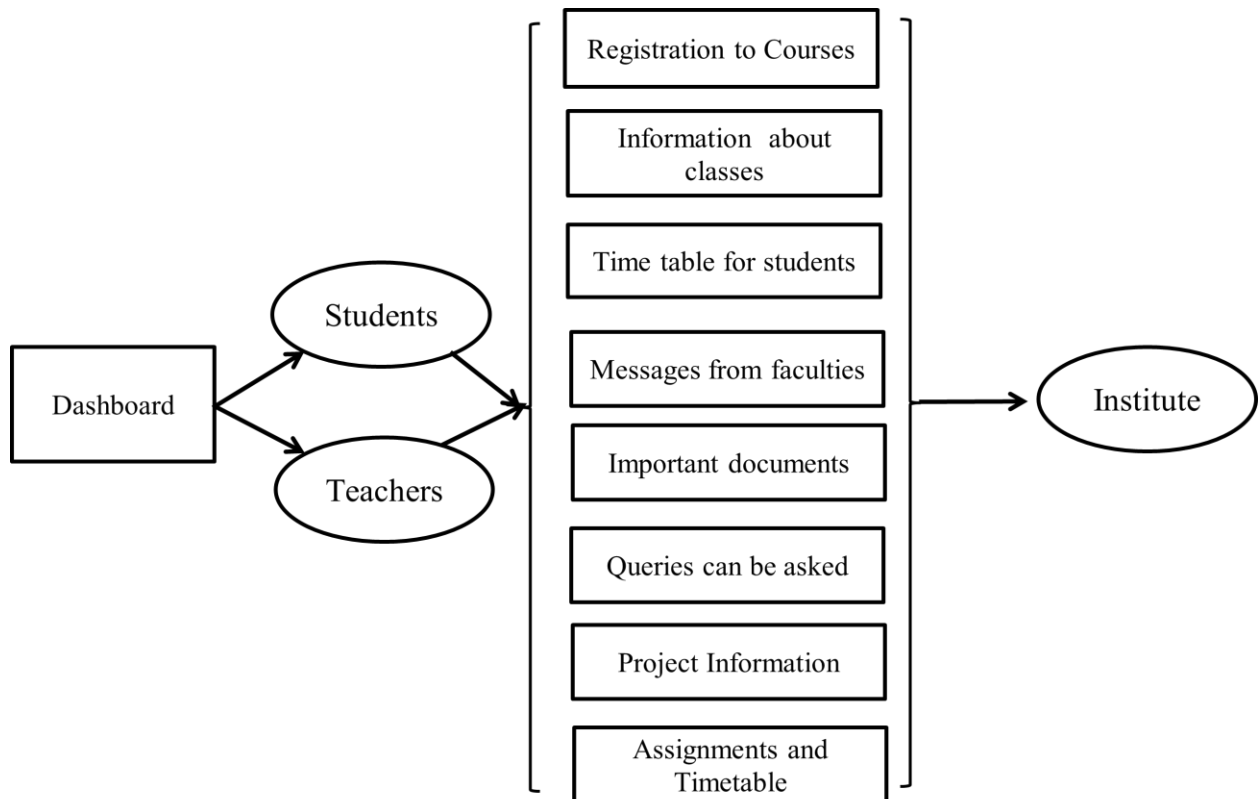


Fig.1 UML Diagram

Login Page:

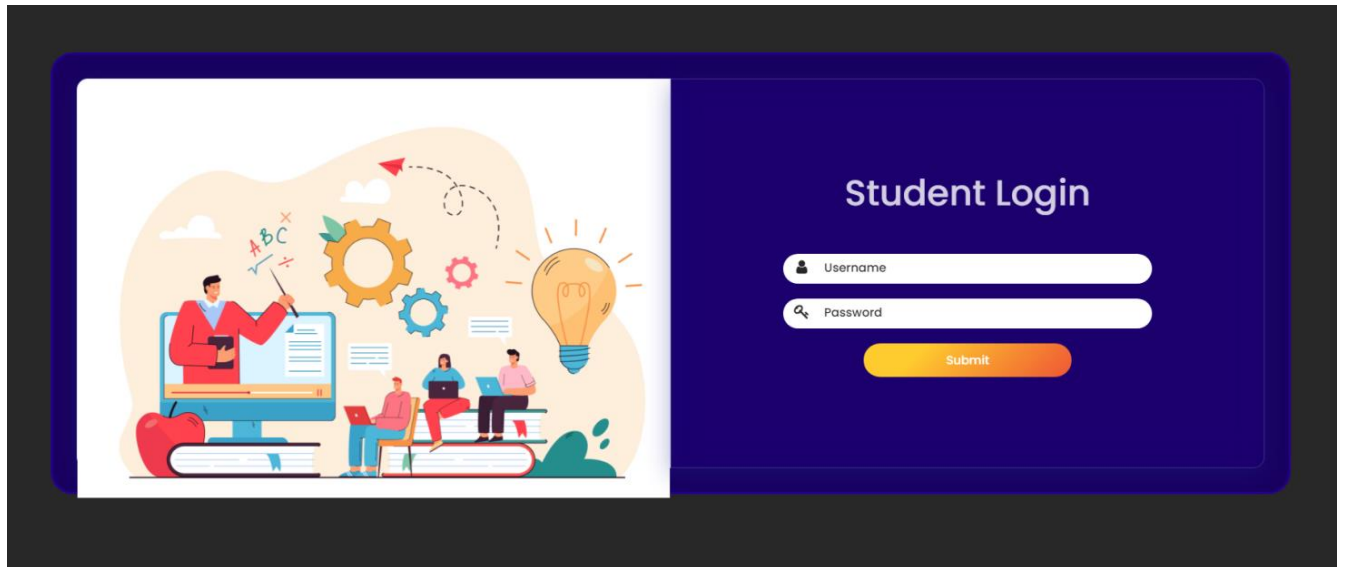


Fig.1 Login Page

Dashboard:

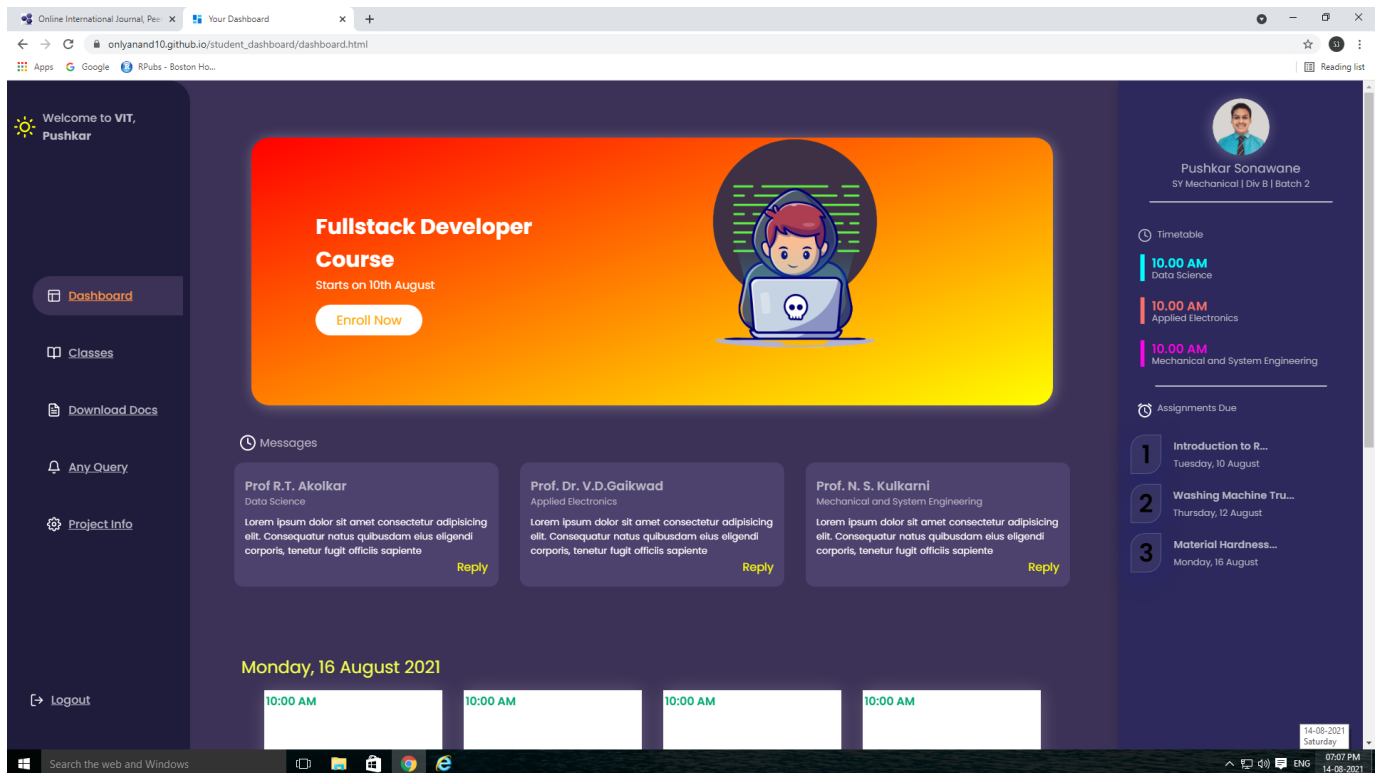


Fig. 2 Dashboard

Classes

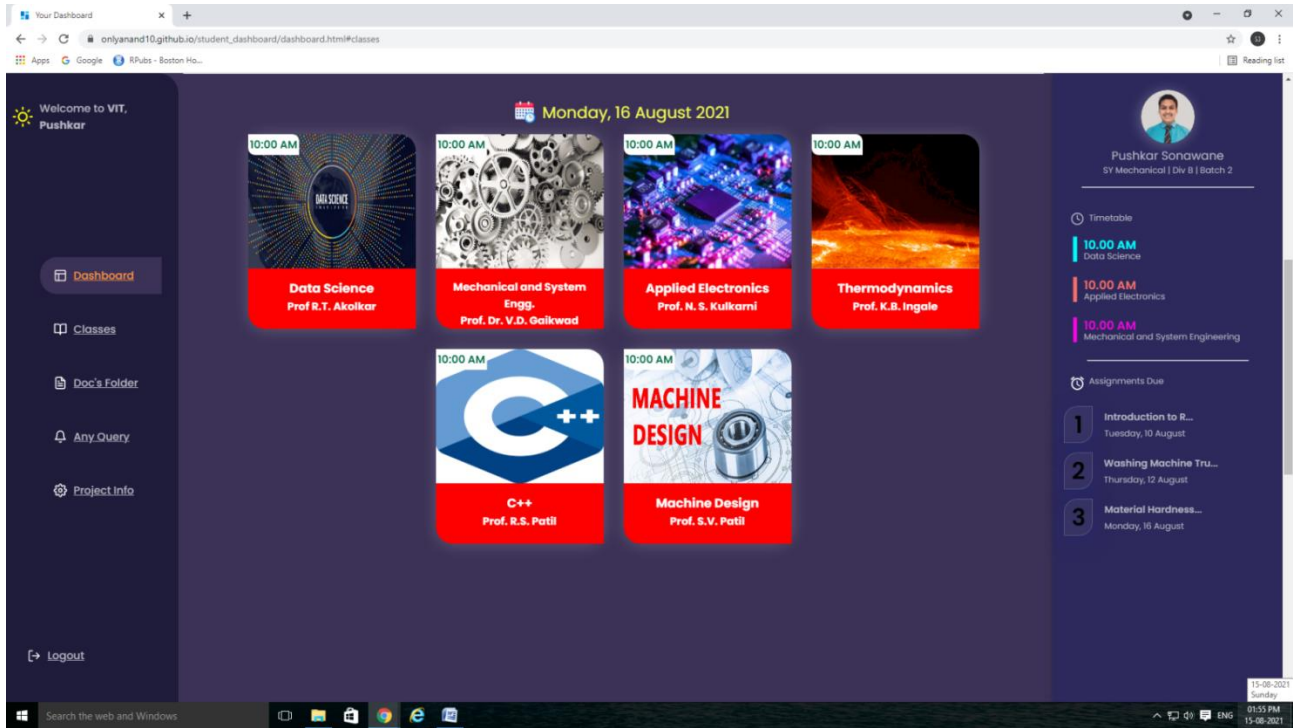


Fig.3 Classes Tab

Documents Folder

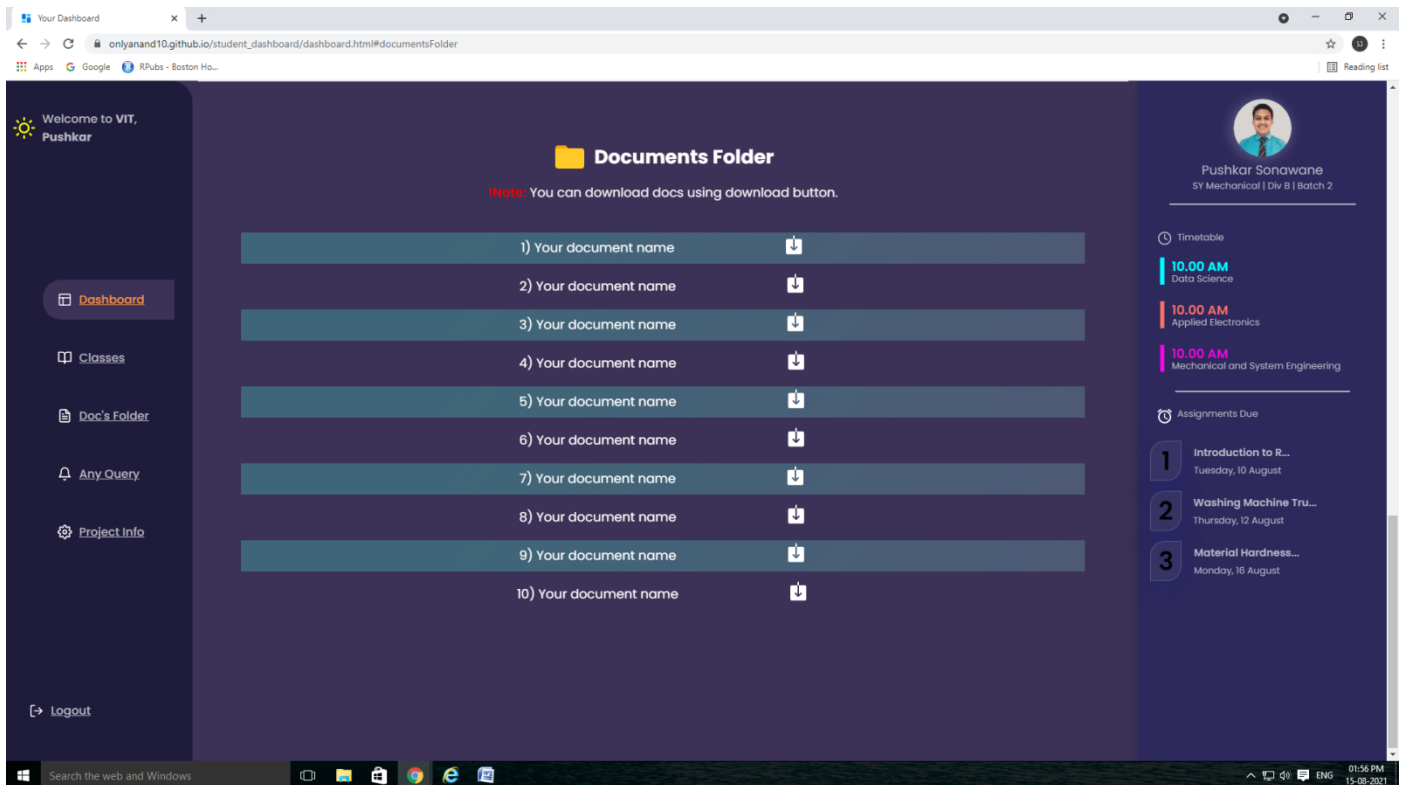
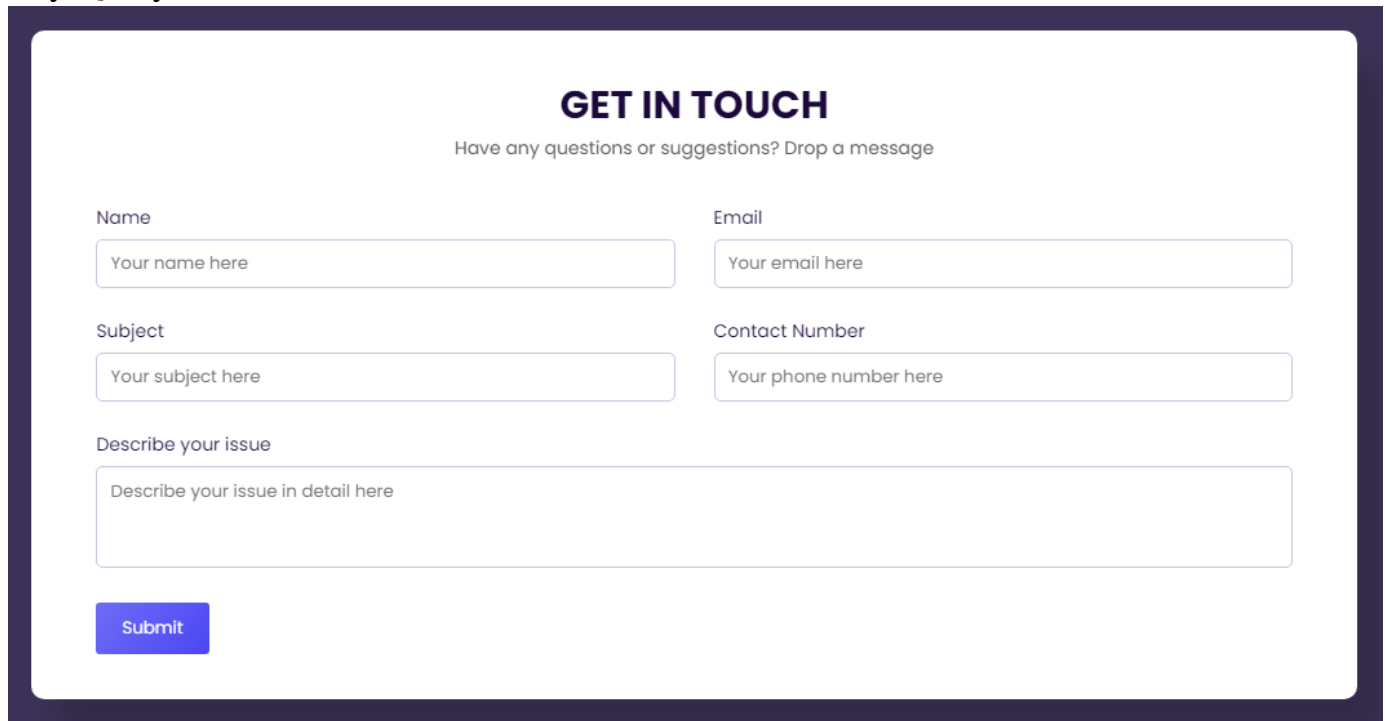


Fig.4 Documents Folder

Any Query Tab



The image shows a contact form titled "GET IN TOUCH" with the subtitle "Have any questions or suggestions? Drop a message". The form contains the following fields:

- Name:** A text input field with the placeholder "Your name here".
- Email:** A text input field with the placeholder "Your email here".
- Subject:** A text input field with the placeholder "Your subject here".
- Contact Number:** A text input field with the placeholder "Your phone number here".
- Describe your issue:** A large text area with the placeholder "Describe your issue in detail here".
- Submit:** A blue button labeled "Submit".

Fig.6 Any Query Tab

Future Scope:

1. Addition of teacher's side dashboard in project.
2. To develop the back end effectively for actual implementation of the project.
3. To design the chat boat system in the 'Any Query' section so that there will be automatic reply to the students.
4. To implement the notification system for the application of Dashboard Menu Design project named as 'Dashboard'.
5. To implement the alarm system in the website as well as application for the upcoming lectures.
6. To make it more effective for aesthetic view.
7. To link some important links of lectures such as NPTEL, MHRD for reference of students to the project.
8. To host it with some proper host initiative for more other options.
9. To make web application as well as mobile application more efficient and responsive.
10. To include face recognition system for secure login.

Conclusions:

By performing this Software Development Project Activity (SDP),

1. I have done the Dashboard Menu Design System for academic purposes by using HTML and CSS.
2. This project will overcome the issues with general dashboard those are mentioned in the literature survey.
3. URL using GitHub has been generated for easy access.
4. Mobile Application is developed named 'Dashboard' is developed.
5. Also, creating of GitHub account and hosting the website is learnt.

Reference:

1. Front End Programming by Mendel Rosenblum.
2. Front End Web Development by Jingjie (Vincent) Zheng.

<https://pushkarms.github.io/Dashboard>

Code for Login Page:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8" />
<meta http-equiv="X-UA-Compatible" content="IE=edge" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>Login Now</title>
<link rel="stylesheet" href="assets/css/style.css" />
<link
rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css"
/>
</head>
<body>
<section class="container">
<div class="main_box">
<div class="icon_box">
```

```

<!-- <p>this is an icon box</p> -->

</div>
<div class="login_box">
<h1 class="heading">Student Login</h1>
<form action="">
<!-- <label for="fname">Username </label><br /> -->
<div class="input-container">
<i class="fa fa-user icon"></i>
<input
type="text"
id="Username"
name="fname"
placeholder="Username"
/><br />
</div>

<!-- <label for="password">Password </label><br /> -->
<div class="input-container">
<i class="fa fa-key icon"></i>
<input
type="password"
id="Username"
name="fname"
placeholder="Password"
/><br />
</div>
<a href="dashboard.html"><button>Submit</button></a>
</form>
</div>
</div>
</section>
</body>
</html>

```

CSS Code for Aesthetic Look

```
@import url("https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;500;600;700&display=swap");
```

```

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

```

```

background-color: #282828;
}

.main_box {
position: relative;
margin: 4rem 8rem;
padding: 2rem;
border: 3px solid #240090;
background-color: #190061;
height: 37rem;
display: flex;
border-radius: 30px;
}
.main_box .icon_box {
width: 50%;
height: 100%;

background: #fff;

border-radius: 15px;
border-top-right-radius: 0;
border-bottom-right-radius: 0;
background: #ffffff;
/* background: rgba(255, 255, 255, 0.8); */
box-shadow: 0 8px 32px 0 rgba(31, 38, 135, 0.37);
-webkit-backdrop-filter: blur(20px);

border: 1px solid rgba(36, 0, 144, 0.18);
backdrop-filter: blur(20px);
}
.main_box .icon_box img {
display: block;
margin: auto;
width: 100%;
margin-top: 40px;
height: auto;
}

.main_box .login_box {
background: #240090;
background: rgba(36, 0, 144, 0.3);
box-shadow: 0 8px 32px 0 rgba(31, 38, 135, 0.37);
backdrop-filter: blur(20px);
-webkit-backdrop-filter: blur(20px);
border-radius: 10px;
border: 1px solid rgba(255, 255, 255, 0.18);
width: 50%;
display: flex;
flex-direction: column;
align-items: center;
justify-content: center;
border-radius: 15px;

```

```

border-top-left-radius: 0;
border-bottom-left-radius: 0;
}
.login_box .heading {
font-size: 3rem;
font-weight: 500;
padding: 20px 0;
color: rgba(255, 255, 255, 0.815);
}
.login_box form {
margin: 15px 0;
width: 100%;
display: flex;
align-items: center;
justify-content: center;
flex-direction: column;
color: #282828;
font-size: 1rem;
}
.login_box form ::placeholder {
color: #282828;
opacity: 1;

font-weight: 500;
font-size: 1rem;
}
.login_box form .input-container {
width: 80%;
margin: 10px 0;
display: flex;
align-items: center;
justify-content: center;
}
.login_box form .input-container i {
font-size: 1.3rem;
text-align: center;
}
.icon {
background: rgb(255, 255, 255);
color: #282828;
min-width: 50px;
height: 40px;
text-align: center;
padding: 0.5rem 0.2rem;
border-top-left-radius: 25px;
border-bottom-left-radius: 25px;
font-size: 3rem;
display: block;
}
.login_box form .input-container input,
a button {
width: 70%;

```

```

padding: 0.5rem 0.2rem;
border-radius: 25px;
border-color: transparent;
border-top-left-radius: 0;
border-bottom-left-radius: 0;
}
.login_box form .input_container input {
padding-left: 2rem;
font-size: 3rem;
}
.login_box form a {
width: 35%;
border-radius: 25px;
margin: 10px 0;
background-color: #ef5734;
background-image: linear-gradient(315deg, #ef5734 0%, #ffcc2f 74%);
text-align: center;
}
.login_box form a button {
width: 35%;
color: #ffffff;
font-weight: 500;
font-size: 1rem;
border-radius: 25px;
background-color: transparent;
/* margin: 10px 0;
background-color: #ef5734;
background-image: linear-gradient(315deg, #ef5734 0%, #ffcc2f 74%); */
}

/* ===== Mobile style part ===== */
@media only screen and (max-width: 600px) {
.container {
height: 100vh;
width: 100%;
display: flex;
justify-content: center;
align-items: center;
}
.main_box {
margin: 0.5rem 0.5rem;
padding: 0.5rem;
border: 3px solid #240090;
background-color: #190061;
height: 44.5rem;
display: flex;
flex-direction: column;
border-radius: 30px;
}

.main_box .icon_box {
width: 100%;

```



```
border-radius: 20px;
border-bottom-right-radius: 0;
border-bottom-left-radius: 0;
height: 40%;
}
.main_box .icon_box img {
display: block;
margin: auto;
width: 100%;
margin-top: 10px;
height: auto;
}
.main_box .login_box {
width: 100%;
border-radius: 20px;
border-top-right-radius: 0;
border-top-left-radius: 0;
height: 60%;
}
.login_box .heading {
font-size: 2.5rem;
font-weight: 500;
padding: 10px 0;
}
.login_box form a button {
width: 100%;
}
.login_box form .input-container input,
a button {
width: 85%;
padding: 0.7rem 0.2rem;
height: 50px;
}
.icon {
height: 50px;
text-align: center;
}
.login_box form .input-container i {
font-size: 1.7rem;
text-align: center;
padding-top: 10px;
}
}
```