Project Report Format

INTRODUCTION

As news is increasingly accessed on smartphones and tablets, the need for personalising news app interactions is apparent. We report a series of three studies addressing key issues in the development of adaptive news app interfaces. We first surveyed users' news reading preferences and behaviours; analysis revealed three primary types of reader. We then implemented and deployed an python flask news app that logs users' interactions with the app. We used the logs to train a classifier and showed that it is able to reliably recognise a user according to their reader type. Finally we evaluated alternative, adaptive user interfaces for each reader type. The evaluation demonstrates the differential benefit of the adaptation for different users of the news app and the feasibility of adaptive interfaces for news apps

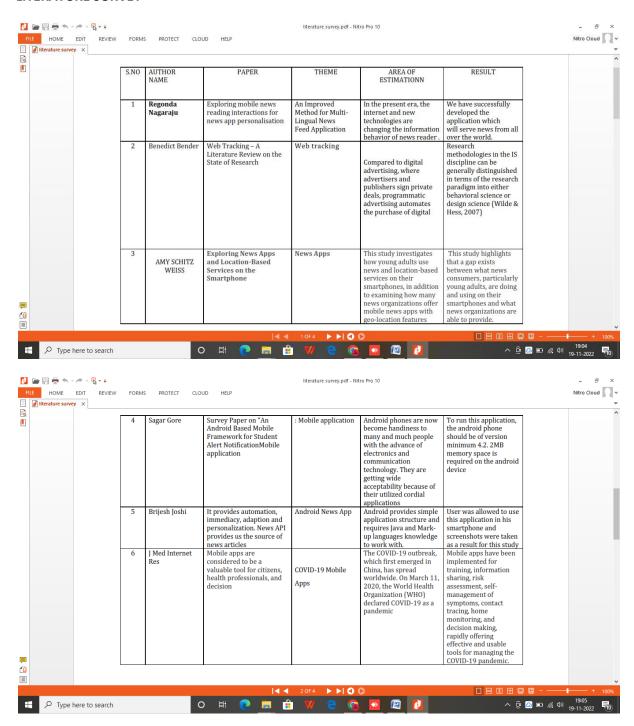
Purpose

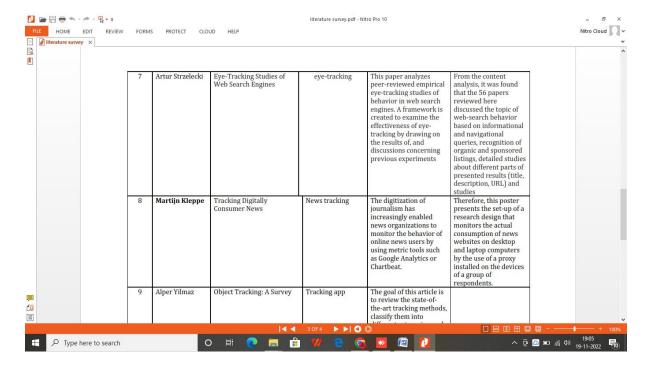
As a rule, in news applications, the news is updated almost every minute. In all this endless news flow, the user should always be able to view exactly information that interests him at the moment. That is why it is highly necessary to think through the functions of sorting news using categories and tags.

It is equally important to test these sorting algorithms in the finished product and make sure that everything works as expected, and you don't have news or articles that appear in the wrong categories.

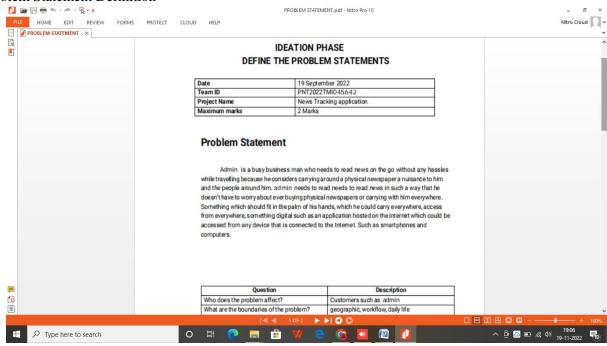
Having made the application more convenient by implementing categories and tags, do not stop there. Almost every good news application or website has search and filtering functions to provide its users with the opportunity to search for information of their interest according to specific criteria and parameters.

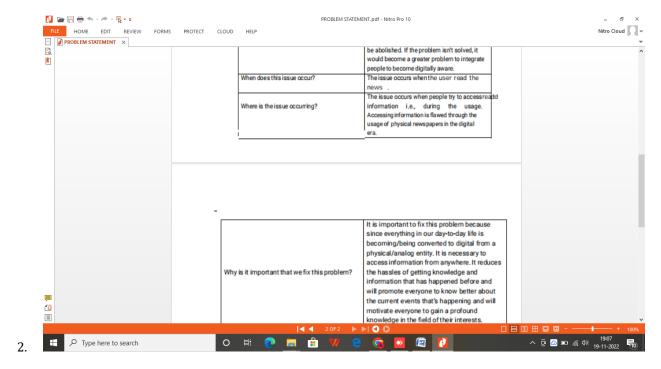
LITERATURE SURVEY



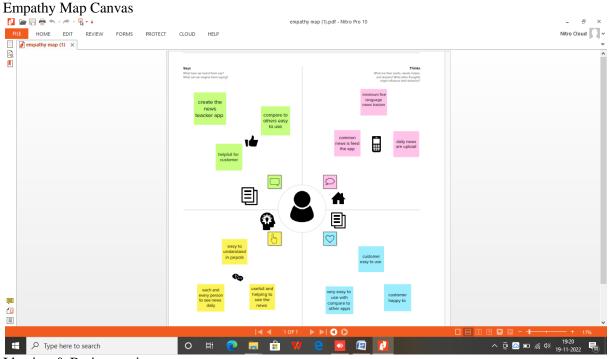


Problem Statement Definition

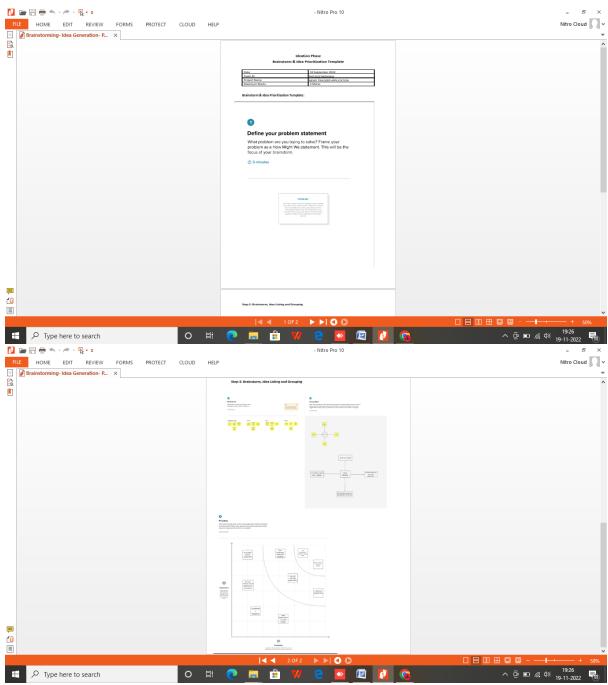




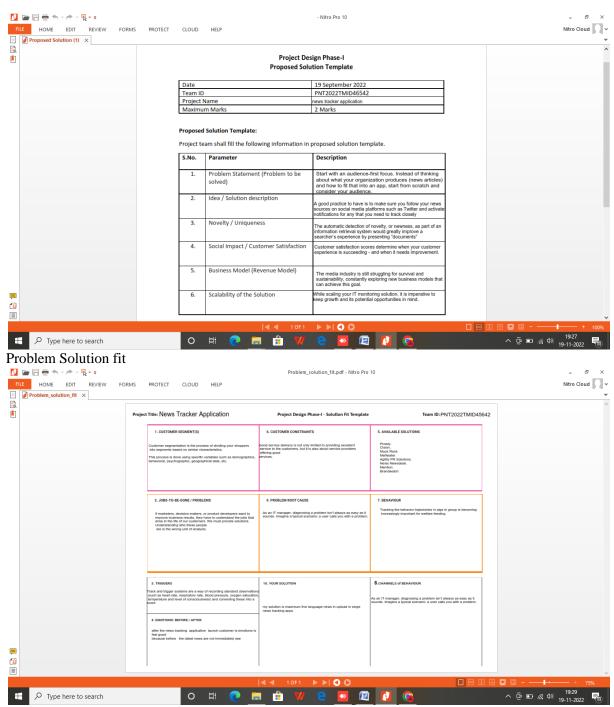
IDEATION & PROPOSED SOLUTION



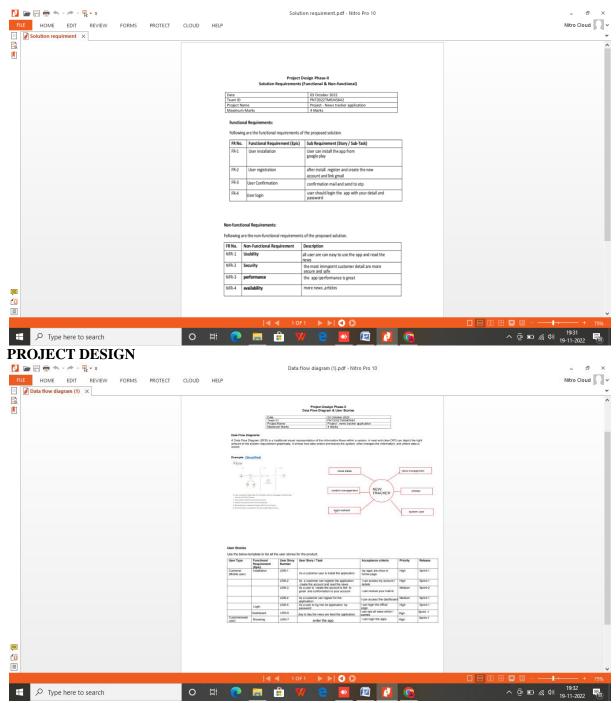
Ideation & Brainstorming



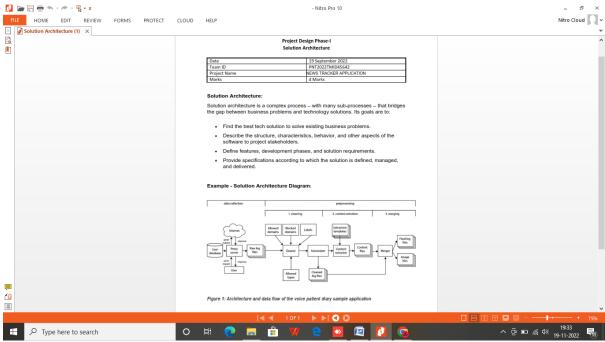
Proposed Solution



REQUIREMENT ANALYSIS



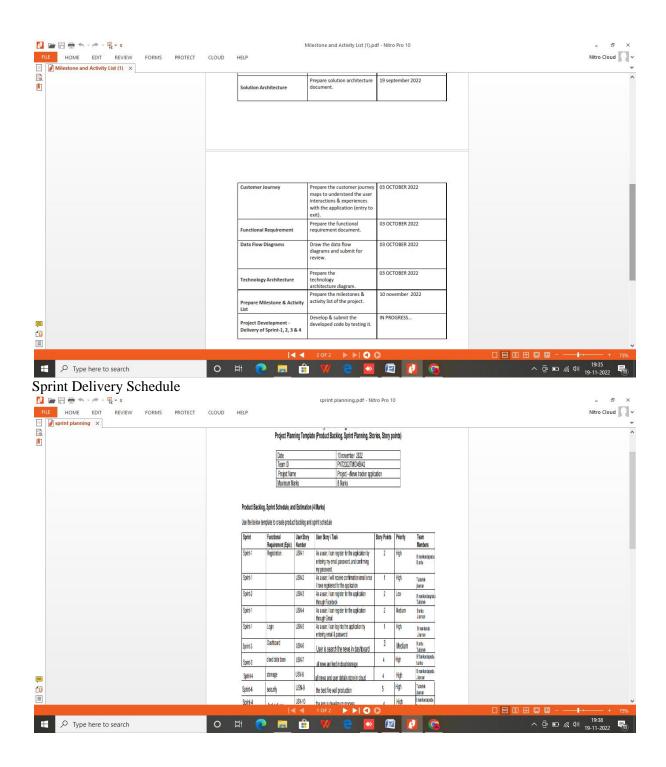
Solution & Technical Architecture

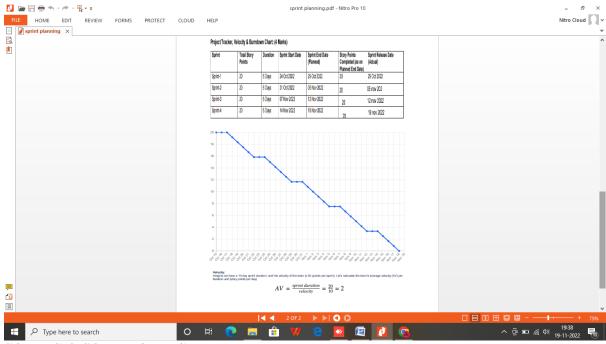


PROJECT PLANNING & SCHEDULING

Sprint Delivery Schedule







CODING & SOLUTIONING

```
<!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" />
  <link rel="stylesheet" href="../css/verify.css" />
  <title>Verify</title>
 </head>
 <body>
  <nav id="head_nav">
   <div class="title_container">
    <h1 id="app_name">News Tracker</h1>
   </div>
  </nav>
  <div class="status-cont">
```

```
<div class="welcome-text">Please wait...□ </div>
</div>
</body>
<script src="../js/verify.js" type="module"></script>
```

</html> ADVANTAGES

Viewers can get their news straight off their smartphone or tablet computer. News is at their fingertips in an instant. An online newspaper can be read more elaborate than a printed newspaper. You can read the old issues too very easily at the click of the mouse.

DISADVANTAGES

- Require data/wifi to get online.
- Companies not making as much money due to free reading for audiences.
- News spreads quicker online people find out news before they should.
- Lose money can't get people to pay for digital.
- Older audiences may not access digital platforms.
- Costly to maintain.

CONCLUSION

As world's technology is rapidly growing we has fast connection and network to instantly connect to other person. Day to day use in mobile, tablets and laptop is increasing, most of the people already have this facilities. In this fast and information oriented world we need to stay updated with every incidents and news too. This News app is android mobile application where user have access to latest news from 120+ newspapers from 50+ countries. The main focus of this application is to connect news articles from all around the world and deliver it to user as fast as possible in best visualize way.

FUTURE SCOPE

A mobile news has simple goals: Capture and retain reader attention, and repeat the process, several times a day. Pretty straightforward. But not that simple in the real world. For a news provider, the smartphone screen is the the most challenging environment ever seen

APPENDIX

Source Code

@import

url('https://fonts.googleapis.com/css2?family=Roboto:wght@100;300&display=swap');

```
padding: 0;
  margin: 0;
  box-sizing: border-box;
  font-family: 'Roboto', sans-serif;
}
body {
  display: flex;
  flex-direction: column;
  width: 100vw;
  /* background-image: url("../assets/pexels-cottonbro-3944418\ 1.png");
  background-repeat: none;
  background-size: cover; */
}
nav {
  display: flex;
  flex-direction: column;
  justify-content: space-between;
  align-items: center;
  margin: auto;
  min-width: 100%;
  box-shadow: 0 0 5px rgba(35, 35, 35, 0.584);
  /* padding: 1rem; */
  background-color: #d9d9d9be;
  height: 100px;
}
```

```
.title_container {
  display: flex;
  justify-content: space-between;
  align-items: center;
  width: 100%;
  margin: auto;
}
. search\_container \ \{
  display: flex;
  justify-content: space-between;
  padding: 5px;
}
.menu\_container \ \{
  display: flex;
}
.menu_container h3 {
  cursor: pointer;
  padding: 1rem 1rem 0.1rem 1rem;
}
. selected\_nav\_item \ \{
  border-bottom: solid 3px black;
}
```

```
#ham_icon {
  padding: 1rem;
}
#user_icon {
  padding: 1rem;
  cursor: pointer;
}
.profile\_div\ \{
  display: flex;
  flex-direction: column;
  position: absolute;
  top: 50px;
  right: 0;
  box-shadow: 0 0 3px black;
  border-radius: 3px;
  background-color: rgb(232, 232, 232);
}
.bookmarked_link {
  border-radius: 3px;
  padding: 0.4rem 2rem;
  cursor: pointer;
  text-decoration: none;
  color: inherit;
}
.logout, .bookmarked_link {
  border-radius: 3px;
```

```
padding: 0.4rem 2rem;
  cursor: pointer;
}
.logout:hover, .bookmarked_link:hover {
  background-color: rgb(255, 255, 255);
}
#home {
  display: flex;
  flex-direction: column;
  justify-content: flex-start;
  align-items: center;
  width: 100%;
  padding: 2rem 2rem 0 2rem;
}
.news_wrapper {
  position: relative;
  display: flex;
  box-shadow: rgba(149, 157, 165, 0.2) 0px 8px 24px;
  transition: 0.5s ease;
  border-radius: 10px;
  padding: 1rem;
  margin-bottom: 1rem;
}
```

```
.news\_cont~\{
  display: flex;
  text-decoration: none;
  color: inherit;
}
.news_wrapper:hover {
  box-shadow: rgba(17, 17, 26, 0.1) 0px 1px 0px, rgba(17, 17, 26, 0.1) 0px 8px 24px, rgba(17, 17,
26, 0.1) 0px 16px 48px;
}
. news\_thumbnail\ \{
  border-radius: 5px;
  width: 300px;
  height: auto;
}
.news\_content\ \{
  padding-left: 1.5rem;
}
.news_content h2 {
  padding-top: 0.5rem;
  padding-bottom: 0.5rem;
}
#home .vertical-wrapper{
  margin-top: 7rem;
}
```

```
.bookmark \{
  position: absolute;
  right: 5px;
  top: 5px;
  height: 1rem;
  width: 1rem;
  cursor: pointer;
}
. an imation-container \{\\
  position: fixed;
  height: 100%;
  width: 100%;
  display: flex;
  justify-content: center;
  align-items: center;
  flex-direction: column;
  background-color: #d7d7d780;
  z-index: 9999;
}
. an imation-container \ img \{
  border-radius: 100%;
}
. none \{ \\
  display: none;
```

```
}
. display\_none \ \{
  display: none;
}
@import
url('https://fonts.googleapis.com/css2?family=Roboto:wght@100;300&display=swap');
* {
  padding: 0;
  margin: 0;
  box-sizing: border-box;
  font-family: 'Roboto', sans-serif;
}
body\ \{
  display: flex;
  flex-direction: column;
  overflow-x: hidden;
  /* background-image: url("../assets/pexels-cottonbro-3944418\ 1.png");
  background-repeat: none;
  background-size: cover; */
}
nav {
  display: flex;
  flex-direction: column;
  justify-content: space-between;
```

```
align-items: center;
  margin: auto;
  min-width: 100%;
  box-shadow: 0 0 5px rgba(35, 35, 35, 0.584);
  /* padding: 1rem; */
  background-color: #d9d9d9;
  height: 100px;
  position: fixed;
  z-index: 999;
}
.title_container \{
  display: flex;
  justify-content: space-between;
  align-items: center;
  width: 100%;
  margin: auto;
}
.search_container {
  display: flex;
  justify-content: space-between;
  padding: 5px;
}
.menu\_container \ \{
```

```
display: flex;
  width: 100vw;
  justify-content: space-between;
  overflow-x: auto;
  overflow-y: hidden;
}
.menu_container::-webkit-scrollbar {
height: 2.5px;
}
/* Track */
.menu_container::-webkit-scrollbar-track {
 background: transparent;
border-radius: 5px;
}
/* Handle */
. menu\_container :: - webkit \text{-} scroll bar\text{-} thumb \ \{
 background: rgba(128, 128, 128, 0.37);
}
/* Handle on hover */
.menu\_container\ h3\ \{
  cursor: pointer;
  padding: 1rem 1rem 0.1rem 1rem;
```

```
}
. selected\_nav\_item \ \{
  border-bottom: solid 3px black;
}
#ham_icon {
  padding: 1rem;
}
#user_icon {
  padding: 1rem;
  cursor: pointer;
}
.profile_div {
  display: flex;
  flex-direction: column;
  position: absolute;
  top: 50px;
  right: 0;
  box-shadow: 0 0 3px black;
  border-radius: 3px;
  background-color: rgb(232, 232, 232);
}
.bookmarked_link {
  border-radius: 3px;
  padding: 0.4rem 2rem;
  cursor: pointer;
```

```
text-decoration: none;
  color: inherit;
}
.logout, .bookmarked_link {
  border-radius: 3px;
  padding: 0.4rem 2rem;
  cursor: pointer;
}
.logout:hover, .bookmarked_link:hover {
  background-color: rgb(255, 255, 255);
}
#home {
  display: flex;
  flex-direction: column;
  justify-content: flex-start;
  align-items: center;
  width: 100%;
  padding: 0 1rem;
}
.news_wrapper {
  position: relative;
  display: flex;
  box-shadow: rgba(149, 157, 165, 0.2) 0px 8px 24px;
  transition: 0.5s ease;
```

```
border-radius: 10px;
  padding: 1rem;
  margin-bottom: 1rem;
  max-width: 800px;
}
.vertical-wrapper{
  display: flex;
  flex-wrap: wrap;
  justify-content: space-evenly;
  align-items: center;
}
.news_cont {
  display: flex;
  text-decoration: none;
  color: inherit;
}
.news_wrapper:hover {
  box-shadow: rgba(17, 17, 26, 0.1) 0px 1px 0px, rgba(17, 17, 26, 0.1) 0px 8px 24px, rgba(17, 17,
26, 0.1) 0px 16px 48px;
}
.news_thumbnail {
  border-radius: 5px;
  width: 300px;
  height: auto;
```

```
}
.news_content {
  padding-left: 1.5rem;
  min-width: 300px;
}
.news_content h2 {
  padding-top: 0.5rem;
  padding-bottom: 0.5rem;
  font-weight: 500;
}
.news\_content\ h3\{
  font-weight: 300;
}
. news\text{-}footer \{
  margin-top: 1.5rem;
  display: flex;
  justify-content: space-between;
  flex-wrap: wrap;
  align-items: flex-start;
}
. horizontal\_content \ \{
  display: flex;
  padding: 1rem;
```

```
margin: 1rem 0;
  max-width: 100%;
  margin-top: 6rem;
  overflow-x: auto;
}
.horizontal_content>div {
  position: relative;
  display: flex;
  padding: 1rem;
  margin: 0 1rem;
}
.horizontal_content .news_cont{
  display: flex;
  flex-direction: column;
}
.bookmark {
  position: absolute;
  right: 5px;
  top: 5px;
  height: 1rem;
  width: 1rem;
  cursor: pointer;
}
```

 $. display_none \ \{$

```
display: none;
}
.horizontal_content::-webkit-scrollbar {
  height: 2.5px;
 }
 /* Track */
 . horizontal\_content ::- webkit\text{-}scroll bar\text{-}track \ \{
  background: transparent;
  border-radius: 5px;
 }
 /* Handle */
 . horizontal\_content::-webkit\text{-}scrollbar\text{-}thumb \ \{
  background: rgba(128, 128, 128, 0.37);
 }
 . horizontal\_content .news\_wrapper \{
  width: 400px;
 }
.img_cont{
  width: 300px;
  height: 200px;
  overflow: hidden;
  content: "";
```

```
}
.load{
  background-color: #d9d9d9;
}
.loading-cont{
  display: flex;
  justify-content: center;
  align-items: center;
  flex-direction: column;
  padding: 1rem;
}
.loading-cont img{
  width: 300px;
  height: auto;
}
.animation-container{
  position: fixed;
  height: 100%;
  width: 100%;
  display: flex;
  justify-content: center;
  align-items: center;
```

```
flex-direction: column;
  background-color: #d7d7d780;
  z-index: 9999;
}
.animation-container img{
  border-radius: 100%;
}
.none{
  display: none;
}
@media (min-width:810px){
  .vertical-wrapper .news_wrapper{
    min-width: 800px;
  }
}
@import url('https://fonts.googleapis.com/css2?family=Khand:wght@300&display=swap');
:root{
  --blue:#2A85F8;
  --blue2:#010B2E;
  --gradient:linear-gradient(360deg, hsla(213, 94%, 57%, 1) 0%, hsla(213, 94%, 57%, 1) 14%,
hsla(227, 96%, 9%, 1) 81%);
  --gradient2:linear-gradient(90deg,#009ffd, #2a2a72);
  --gradient3:linear-gradient(to bottom left, #414141 -19%, #000000 100%);
}
*{
```

```
font-family: 'Khand', sans-serif;
  margin:0;
  padding:0;
  border:none;
  outline: none;
  transition: all .2s linear;
  box-sizing: border-box;
  text-decoration: none;
}
*::selection{
  background:white;
  color:var(blue);
}
/*html header font size*/
html{
  font-size: 62.5%;
  overflow-x: hidden;
}
body\{
  background-color:#f6f5f7;
  display:flex;
  justify-content:center;
  align-items: center;
  height:100vh;
  margin:0 auto;
  background:url(../assets/sample2.jpg)no-repeat;
```

```
background-size:cover;
  background-position:center;
  background-attachment:fixed;
  position:relative;
}
. container \{\\
  background-color: white;
  border-radius: 10px;
  width: 768px;
  max-width: 100%;
  min-height: 480px;
  position: relative;
  overflow: hidden;
  box-shadow: 0px 14px 28px rgba(0,0,0,0.25),
         0px 14px 10px rgba(0,0,0,0.22);
}
. form\text{-}container \{
  position:absolute;
  top:0%;
  height:100%;
  transition: all 0.8s ease-in-out;
}
.sign-up-container{
  left:0;
  width:50%;
  z-index:1;
```

```
opacity:0;
}
.sign-up-container{
  overflow-y:auto;
}
form{
  background-color: white;
  display:flex;
  align-items: center;
  justify-content: center;
  flex-direction: column;
  padding:0 50px;
  height:100%;
  text-align: center;
  overflow: auto;
}
h1{
  font-weight: bold;
  font-size:2.8rem;
}
h2
{
  color:red;
}
a{
 color:#333;
```

```
font-size:2.5rem;
 margin:15px;
}
span{
  font-size:2rem;
}
.form-container form .box\{
  width:100%;
  border-radius: 10px;
  border:.2rem solid #666;
  font-size:1.6rem;
  color: #333;
  margin:0.5rem;
  padding:0.5rem;
}
/*input box text adjustment*/
.form-container form .box::placeholder{
  font-style:normal;
}
/*underline text adjustment*/
.form-container form .box:focus{
  border: 1px solid;
  border-radius:10px;
  border-color:rgba(0, 34, 255, 0.822);
}
. sign-in-container \{\\
```

```
left:0;
  width:50%;
  z-index:2;
}
. overlay\text{-}container \{
  position:absolute;
  top:0;
  left:50%;
  width:50%;
  height:100%;
  overflow:hidden;
  z-index:100;
  transition: all 0.6s ease-in-out;
}
.overlay{
  background-color:var(--blue);
  background: linear-gradient(to bottom,var(--blue),var(--blue2));
  background-repeat: no-repeat;
  background-size:cover;
  background-position: 0 0;
  color:white;
  position:relative;
  left:-100%;
  width:200%;
  height:100%;
```

```
transform: translate X(0);
  transition: all 0.6s ease-in-out;
}
.overlay-panel{
  position: absolute;
  display: flex;
  flex-direction: column;
  width:50%;
  height:100%;
  top:0;
  align-items: center;
  justify-content: center;
  transform:translateX(0);
  padding:0rem 2.5rem;
}
.overlay-left{
  transform: translateX(-20%);
}
.overlay-right{
  right:0;
  transform: translateX(0);
}
.container.right-panel-active .sign-in-container{
  transform: translateX(100%);
}
.container.right-panel-active .sign-up-container{
```

```
transform: translate X (100\%);
  opacity: 1;
  z-index: 5;
  animation:slide 0.6s;
}
@keyframes slide{
  0%,49.99%{
    opacity:0;
   z-index:1;
  }
  50%,100%{
    opacity:1;
    z-index:5;
  }
}
.btn{
  font-weight:bold;
  font-size:1.5rem;
  border-radius: 2rem;
  text-transform: capitalize;
  letter-spacing:1px;
  color:white;
  background:var(--gradient2);
  padding:0.8rem 2rem 0.8rem 2rem; /*top right bottom left*/
  margin-top:1.5rem;
  margin-bottom: 5rem;
```

```
position: relative;
  z-index: 0;
  overflow: hidden;
  box-shadow: 0.1rem.3rem rgba(255, 0, 0, 0.822);
  cursor:pointer;
}
.btn:active{
  transform: scale(.85);
}
.btn::before{
  content:";
  position:absolute;
  top:-1rem;
  left:-100%;
  background: #fff9;
  height:150%;
  width:20%;
  transform:rotate(25deg);
  z-index:-1;
}
.btn:hover::before {
  transition:.5s linear;
  left:120%;
}
```

```
.container.right-panel-active .overlay-container{
  transform: translateX(-100%);
}
.container.right-panel-active .overlay{
  transform:translateX(50%);
}
.container.right-panel-active .overlay-left{
  transform: translateX(0);
}
.container.right-panel-active .overlay-right{
  transform: translateX(20%);
}
. container\text{-}check box\ \{
  max-width: 640px;
  font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
  font-size: 13px;
  display: inline;
  overflow-y:auto;
}
ul.ks-cboxtags {
  list-style: none;
  padding: 20px;
}
ul.ks-cboxtags li{
```

```
display: inline;
}
ul.ks-cboxtags li label{
  display: inline-block;
  background-color: rgba(255, 255, 255, .9);
  border: 2px solid rgba(139, 139, 139, .3);
  color: #000;
  border-radius: 25px;
  white-space: nowrap;
  margin: 3px 0px;
  -webkit-touch-callout: none;
  -webkit-user-select: none;
  -moz-user-select: none;
  -ms-user-select: none;
  user-select: none;
  -webkit-tap-highlight-color: transparent;
  transition: all .2s;
}
ul.ks-cboxtags li label {
  padding: 8px 12px;
  cursor: pointer;
}
ul.ks-cboxtags li label::before {
  display: inline-block;
```

```
font-style: normal;
  font-variant: normal;
  text-rendering: auto;
  -webkit-font-smoothing: antialiased;
  font-family: "Font Awesome 5 Free";
  font-weight: 900;
  font-size: 12px;
  padding: 2px 6px 2px 2px;
  content: "\f067";
  transition: transform .3s ease-in-out;
}
ul.ks-cboxtags li input[type="checkbox"]:checked + label::before {
  content: "\f00c";
  transform: rotate(-360deg);
  transition: transform .3s ease-in-out;
}
ul.ks-cboxtags li input[type="checkbox"]:checked + label {
  border: 2px solid #1bdbf8;
  background-color: #12bbd4;
  color: #fff;
  transition: all .2s;
}
ul.ks-cboxtags li input[type="checkbox"] {
```

```
display: absolute;
}
ul.ks-cboxtags li input[type="checkbox"] {
 position: absolute;
 opacity: 0;
}
ul.ks-cboxtags li input[type="checkbox"]:focus + label {
 border: 2px solid #e9a1ff;
}
@import
url('https://fonts.googleapis.com/css2?family=Roboto:wght@100;300&display=swap');
* {
  padding: 0;
  margin: 0;
  box-sizing: border-box;
  font-family: 'Roboto', sans-serif;
}
body {
  display: flex;
  flex-direction: column;
  width: 100vw;
  /* background-image: url("../assets/pexels-cottonbro-3944418\ 1.png");
  background-repeat: none;
  background-size: cover; */
}
```

```
nav {
  display: flex;
  flex-direction: column;
  justify-content: space-between;
  align-items: center;
  margin: auto;
  min-width: 100%;
  box-shadow: 0 0 5px rgba(35, 35, 35, 0.584);
  /* padding: 1rem; */
  background\text{-}color\text{:}\ \#d9d9d9be;
  height: 100px;
}
.title_container {
  display: flex;
  justify-content: space-between;
  align-items: center;
  width: 100%;
  margin: auto;
}
.search_container {
  display: flex;
  justify-content: space-between;
  padding: 5px;
}
```

```
.menu\_container \ \{
  display: flex;
}
.menu_container h3 {
  padding: 1rem 1rem 0.1rem 1rem;
  cursor: pointer;
}
.menu_container h3:first-child {
  border-bottom: solid 3px black;
}
#ham_icon {
  padding: 1rem;
}
#user_icon {
  padding: 1rem;
  cursor: pointer;
}
.profile_div {
  display: flex;
  position: absolute;
  top: 50px;
  right: 0;
  box-shadow: 0 0 3px black;
  border-radius: 3px;
```

```
}
.logout {
  padding: 0.4rem 2rem;
}
#home {
  display: flex;
  flex-direction: column;
  justify-content: flex-start;
  align-items: center;
  width: 100%;
  padding: 2rem 2rem 0 2rem;
}
.display_none {
  display: none;
}
.logout{
  cursor: pointer;
}
iframe{
  height: calc(100vh - 100px);
}
url('https://fonts.googleapis.com/css2?family=Roboto:wght@100;300&display=swap');
*,*::before,*::after{
  margin: 0;
```

```
padding: 0;
  box-sizing: border-box;
  font-family: 'Roboto', sans-serif;
}
body{
  background-color: aliceblue;
  min-height: 100vh;
}
nav {
  display: flex;
  flex-direction: column;
  justify-content: space-between;
  align-items: center;
  margin: auto;
  min-width: 100%;
  box-shadow: 0 0 5px rgba(35, 35, 35, 0.584);
  background-color: #d9d9d9be;
  padding: 1rem;
}
. status\text{-}cont \{
  display: flex;
  min-height: 70vh;
  flex-direction: column;
  align-items: center;
  justify-content: center;
```

```
font-weight: medium;
  text-align: center;
  padding: 1rem;
}
. welcome\text{-}text \{
  font-size: 2.5rem;
}
. sub\text{-}text \{
  font-size: 1.5rem;
}
```

 $\label{link:https://github.com/IBM-EPBL/IBM-Project-20306-1659716774} Project demon link: \\ \underline{https://youtu.be/esMhZgEY10U}$