

SPRINT 01 CODES

IoT Based Safety Gadget for Child Safety Monitoring & Notification

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CODE FOR CONFIRMATION PAGE: (EMAIL INDEX)

```
<!DOCTYPE html>
<html lang="en" style="height: 100%; margin: 0;">
<head>
<meta charset="UTF-8" />
<meta name="description" content="The Home Page after Logged In" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>IOT Based Safety Gadget for Child Safety Monitoring and Notification</title>
<script src=".//localforage.js"></script>
<script>
if (window.location.hostname !== "localhost")
{ if (location.protocol !== "https:") {
location.replace(
`https://${location.href.substring(
location.protocol.length
)}`)}
)
}
}
}
async function check() {
let data = localforage.getItem("userData")
if (data == null) {
window.location.href = "/login"
}
}
check()
</head>
<body
</script>
style="
height: 100%;
margin: 0;
font-weight: 300;
font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI',
Roboto, Oxygen, Ubuntu, Cantarell, 'Open Sans', 'Helvetica
Neue',
```

```
sans-serif;
"
>
flex-direction: column;
align-items: center;
justify-content:
center;
text-align: center;
"
>
<div
class="details"
style="
display: flex;
flex-direction:
column; align-items:
center; gap: 20px;
padding: 1rem;
border-radius:
5px;
box-shadow: 0 0 8px 0px #44444444;
max-width: 80%;
"
>
<h1 class="name" style="margin: 0"></h1>
<div
class="imageContainer"
style="padding: 10px; height: 10rem; width: 10rem"
>
<img class="image" alt="profile picture" />
</div>
<h2 class="email" style="margin: 0"></h2>
<a style="text-decoration: none;text-align: center;font-size: 1.2rem;color: #0070f3;font-weight:
400;" href="./dashboard">Go to Dashboard ↗</a>
</div>
<script>
</div>
async function main() {
let name = document.querySelector(".name")
let image = document.querySelector(".image")
let email = document.querySelector(".email")
let userData = await localforage.getItem("userData")
if(userData == null) {
window.location.href = "/login"
}
name.innerHTML = `Welcome ${userData.firstName} ${userData.lastName}!`;
image.src = userData.profilePic
email.innerHTML = `Your email is: <a style="text-decoration: none;color: #0072B5;" href="mailto:${userData.email}">${userData.email}</a>`;
}
main()
</script>
</body>
</html>
```

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">
<link rel="stylesheet" href="/css/login.css">
<title>Sign Up</title>
<script>
if (window.location.hostname !== "localhost")
{ if (location.protocol !== "https:") {
location.replace(
`https:${{location.href.substring(
location.protocol.length
)}}`)}
)
}
}
}
</script>
<script src="./localforage.js"></script>
</head>
<body>
<div class="wrapper">
<div class="loginContainer">
<span>SignUp To Continue</span>
<div class="traditionalLoginContainer">
<form class="signupForm" action="/" method="post">
<input type="email" name="email" placeholder="Email" id="email">
<input type="password" name="password" placeholder="Password" id="password">
<input class="loginButton" type="submit" value="Login">
</form>
</div>
<div class="loginWithFireContainer">
<button type="button" class="fire" title="Login with Safety" id="fire">Login with Safety</button>
</div>
<a class="hyperLink" href="/register">Don't have an Account? Register ↗</a>
</div>
</div>
<script>
// Necessary for Fire OAuth to Function
const fireBroadcastingChannel = new
BroadcastChannel('fireOAuthChannel');
fireBroadcastingChannel.addEventListener('message', async event => {
let data = event.data
/**
 * @typedef {Object<string, any>} Data
 * @property {boolean} success - Whether the login was successful
 * @property {string} token - The data returned from the login i.e. Fire Token
 */
// data.token is the message sent from the fireOAuthChannel after verification
// data.success is a boolean that indicates whether the verification was successful
// data.token is the fire token
// What to do with the Fire Token?
// * Fire Token is an unique token which uniquely identifies the user who authorized your login attempt
// with Fire
// * You can use this token ONLY ONCE as it will be destroyed after the first use
// 1. Send the fire token to the Fire Server to verify the user
// - You can do that client sided or server sided
```

```

// - You need to send a POST Request to the Fire Server with the fire token
// at the URL: http://localhost:3003/api/tokens/verify
// - The Fire Server will verify the fire token and return a response
// - If the verification was successful - CODE (200), the Fire Server will return a response with
the user's data
// - If the verification was unsuccessful - CODE (400) or CODE (401), the Fire Server will return
a response with an error 'message'
// - You can use the data returned from the Fire Server to create a new user in your database
// This example will send the token to Fire Servers and console.log the response
console.log("%c" + `Fire Token: ${data.token}`, `color: #f1c40f; font-weight: bold;`);
const response = await fetch('https://fire.adaptable.app/api/tokens/verify', {
method:
'POST',
headers: {
'Content-Type': 'application/json'
},
body: JSON.stringify({
token: data.token
})
})
// get the response
const responseData = await response.json()
// console.log the response
console.log(responseData)
await localforage.setItem('userData', {...responseData, isFire: true})
// Adding the user data to the user Database
let database = await localforage.getItem("userDatabase")
if (database == null) {
database = []
}
database.push(responseData)
await localforage.setItem("userDatabase", database)
// redirect to the home
page window.location.href
= '/'
})
function popupwindow(url, title, w, h) {
var left = (screen.width/2)-(w/2);
var top = (screen.height/2)-(h/2);
return window.open(url, title, 'toolbar=no, location=no, directories=no, status=no, menubar=no,
scrollbars=no, resizable=no, copyhistory=no, width=' + w + ', height=' + h + ', top=' + top + ', left=' + left);
}
document.getElementById("fire").addEventListener("click", function() {
popupwindow("/fireoauth.html", "Fire OAuth", 450, 600)
})
</script>
<script>
// this Website's Scripts / App Logic
document.querySelector(".signupForm").addEventListener("submit", async (e) => {
e.preventDefault()
let email = document.getElementById("email").value
let password =
document.getElementById("password").value let flag = false
let userData = await localforage.getItem("userDatabase")
if(userData) {
userData.forEach(e =>
{ if(e.email ===
email) {
if(e.password === password || e.isFire === true) {
localforage.setItem("userData", e)
}
}
}
)
}
)

```

```
flag = true
window.location.href =
"/"
}
}
})
} else {
alert("User Not Found")
}
if(!flag) {
alert("Invalid Credentials")
}
})
</script>
</body>
</html>
```

CODE FOR FIREOAUTH:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link rel="stylesheet" href="/css/fireoauth.css">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/nprogress/0.2.0/nprogress.min.css">
<link rel="shortcut icon" href="https://raw.githubusercontent.com/tharunoptimuspd/firepwa/main/favicon.ico?token=GHSAT0AAAAAABR46HVJ5M5L3QGFRZRQXOISYUJUWAA" type="image/x-icon">
<style>
html,
body
{
height: 100%;
margin: 0;
font-family: -apple-system, BlinkMacSystemFont, "Segoe UI", Roboto, Oxygen, Ubuntu, Cantarell, "Open Sans", "Helvetica Neue", sans-serif;
font-weight: 300;
}
a {
text-decoration: none;
color: #007bff;
font-weight: 500;
font-size:
1.2rem;
}
h3 {
font-size: 1.4rem;
}
h3, h4 {
margin: 0;
padding: 0.3rem 0;
}
.wrapper {
display:
flex;
flex-direction:
column; align-items:
center;
justify-content:
center; height: 100%;
text-align: center;
}
.oneClickSignin {
padding:
0.5rem;
border: 1px solid
#44444444; border-radius:
5px;
box-shadow: 0 0 3px 0px #44444444;
opacity: 0.2;
pointer-events: none;
}
.qrcode {
opacity: 0.1;
}
.learnAboutFire {
```

```

padding-top: 1.25em;
}
.qrHolder {
display: none;
margin-top: 3rem;
}
.qrContainer {
align-items: center;
display: flex;
justify-content:
center; padding: 8px;
margin: 2rem auto;
box-shadow: 0 0px 6px 1px rgb(0 0 0 /
16%); border: 1px solid #44444444;
border-radius:
6px; width: 200px;
height: 200px;
}
</style>
<title>Fire OAuth</title>
<script>
if (window.location.hostname !== "localhost")
{ if (location.protocol !== "https:") {
location.replace(
`https:${location.href.substring(
location.protocol.length
)}`)}
)
}
}
</script>
</head>
<body>
<div class="wrapper">
<h3 class="pageTitle">Login with SAFETY</h3>
<div class="qrAuthorize">
<h4 class="subTitle">Scan QR from your Fire OAuth App </h4>
<div class="qrContainer">
<canvas id="qr-code" class="qrcode"></canvas>
</div>
</div>
<div class="oneClickSignin">
<h4>Have Fire PWA on this device?</h4>
<a target="_blank" id="authorizeOverLink"
href="https://firepwa.netlify.app/authorize?sessionId" rel="noopener">Click to Authorize
</a>
</div>
<div class="learnAboutFire">
<a target="_blank" href="https://fireoauth.netlify.app" rel="noopener">Learn More about SAFETY</a>
</div>
</div>
<script src="https://cdnjs.cloudflare.com/ajax/libs/nprogress/0.2.0/nprogress.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/qrious/4.0.2/qrious.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/socket.io/4.2.0/socket.io.js"></script>
<script>
const FIRE_API_KEY = "635b790a3bcc6b59c4b772d0"
const FIRE_ENDPOINT = "https://fire.adaptable.app/api/apis/generate"
const CHANNEL_NAME = "fireOAuthChannel"
const broadCastingChannel = new BroadcastChannel(CHANNEL_NAME)
const FIRE_SERVER_SOCKET_ENDPOINT = "https://fire.adaptable.app"

```

```
let socket = io(FIRE_SERVER_SOCKET_ENDPOINT)
let qr
let qrcode = document.querySelector(".qrcode")
let oneClickSignin = document.querySelector(".oneClickSignin")
let pageTitle = document.querySelector(".pageTitle")
let subTitle = document.querySelector(".subTitle")
function setOpacity(opacity) {
  oneClickSignin.style.opacity =
    opacity
  oneClickSignin.style.pointerEvents = opacity === "1" ? "auto" : "none"
  qrcode.style.opacity = opacity
}
async function getSessionID()
{
  let response
  try {
    response = await fetch(` ${FIRE_ENDPOINT}/ ${FIRE_API_KEY}` , {
      method: "GET",
      headers: {
        "Content-Type": "application/json",
      }
    })
  } catch (error) {
    console.log(error)
  }
  return null
}
let data = await response.json()
let { sessionId, chatRoomId } = data
return { sessionId, chatRoomId }
}
function generateQR(value)
{
  (qr = new QRious({
    element:
      document.getElementById("qr-code"),
    size: 200,
    level: 'M',
    value,
  }))
}
function changeHREF ({sessionId, chatRoomId}) {
  let firePwaUrlHostname = "https://firepwa.netlify.app"
  let originURL = encodeURIComponent(window.location.origin)
  let url =
` ${firePwaUrlHostname}/authorize.html?sessionId=${sessionId}&chatRoomId=${chatRoomId}&url=${originU RL}`
  let a =
    document.getElementById("authorizeOverLink")
  a.href = url
}
async function fire()
{
  NProgress.set(0.4)
  let { sessionId, chatRoomId } = await getSessionID()
  if(sessionId === undefined || chatRoomId === undefined || sessionId === null || chatRoomId === null) {
    pageTitle.innerHTML = "Something went wrong "
    subTitle.innerHTML = "Please try again later "
    return
  }
  setOpacity("1")
  NProgress.done()
```

```
) let data = {
sessionId,
url: encodeURIComponent(window.location.origin)
}
data = JSON.stringify(data)
generateQR(data)
changeHREF({sessionId,
chatRoomId}) socket.emit("join
room", sessionId)
}
fire()
socket.on("trusted token", (token) => {
let data = { }
data.success =
true data.token =
token
broadCastingChannel.postMessage(data)
window.close()
})
</script>
</body>
</html>
```

CODE FOR DASHBOARD 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">
<link rel="stylesheet" href=".css/dashboard.css">
<title>Dashboard</title>
<script src=".localforage.js"></script>
</head>
<body>
<div class="wrapper">
<div class="header">
<span class="heading">Dashboard</span>
<span class="right">
<span class="username">Hello User</span>
<span>

</span>
</span>
</div>
<div class="actionCenter">
<div class="action">
<span>Create Child Card</span>
</div>
<div class="action">
<span class="logout">Log out</span>
</div>
</div>
<div class="childCardContainer">
<div class="childCard">
<div class="childCardHeader">
<span>Child Name</span>
<span>Age 12</span>
</div>
<div class="actions">
<span>View</span>
<span>GeoFence</span>
</div>
</div>
</div>
</div>
<script>
async function main() {
let userData = await localforage.getItem('userData')
if(userData == null) {
window.location.href = "/login"
}
document.querySelector(".username").innerHTML = `Hello ${userData.firstName}`
document.querySelector(".profilePic").src = userData.profilePic
}
main()
document.querySelector(".logout").addEventListener("click", async () => {
await localforage.setItem('userData', null)
window.location.href = "/login"
})
```

```
</script>
</body>
</html>

CSS:

html, body
{ margin:
0;
padding: 0;
font-family: system-ui, -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, Oxygen,
Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;
}
.wrapper {
display:
flex;
flex-direction: column;
height: 100vh;
margin: 0 auto;
}
.header {
display:
flex;
justify-content:
space-between; align-items:
center;
padding: 1rem;
background-color: #f1f1f1;
}
.heading {
font-size: 1.3rem;
}
.right {
display: flex;
align-items: center;
gap: 0.5rem;
}
.actionCenter {
display:
flex;
justify-content:
flex-end; align-items:
center; gap: 1rem;
padding: 0.5rem 0;
}
.actionCenter .action {
padding: 0.5rem 0.8rem;
border: 1px solid
#44444444; border-radius:
12px;
margin-right: 0.5rem;
cursor: pointer;
}
.actionCenter .action:hover {
background-color:
#0070f3;
color: white;
}
.childCardContainer
{ display: flex;
```

```
flex-wrap: wrap;
padding: 0.5rem
1rem;
}
.childCardContainer .childCard {
display: flex;
flex-direction: column;
border: 1px solid
#44444444; border-radius:
12px;
max-width: 300px;
font-size: 1.4rem;
}
.childCardContainer .childCard .childCardHeader {
display: flex;
gap: 3rem;
margin: 0.1rem 0.1rem 0.8rem;
padding: 1rem 0.8rem 0;
}
.childCardContainer .childCard .actions
{ background-color: #0070f3;
padding: 2rem 0.5rem
1rem; color: white;
display: flex;
justify-content:
space-around; border-radius:
12px;
border-top-left-radius: 0;
border-top-right-radius: 0;
}
.childCardContainer .childCard .actions span {
border: 1px solid #0070f3;
background-color: white;
color: #0070f3;
padding: 0.3rem
0.9rem; border-radius:
12px;
cursor: pointer;
}
```

CODE FOR LOGIN PAGE: CSS

```
html,  
body {  
height: 100%;  
margin: 0;  
font-weight: 300;  
font-family: -apple-system, BlinkMacSystemFont, "Segoe UI", Roboto, Oxygen,  
Ubuntu, Cantarell, "Open Sans", "Helvetica Neue", sans-serif;  
}  
.wrapper {  
height:  
100%;  
display: flex;  
align-items: center;  
justify-content: center;  
}  
.loginContainer {  
display: flex;  
flex-direction: column;  
gap: 1rem;  
min-width: 25rem;  
padding: 1rem  
3rem;  
border: 1px solid #44444444;  
box-shadow: 0px 3px 2px 1px  
#44444444; border-radius: 8px;  
}  
.loginContainer span {  
text-align:  
center; font-size:  
3rem;  
font-weight: 500;  
margin: 1rem 1rem 3rem;  
}  
.traditionalLoginContainer form  
{ display: flex;  
flex-direction: column;  
align-items: center;  
justify-content:  
center;  
}  
.traditionalLoginContainer :is(input[type="text"], input[type="password"], input[type="email"]) {  
margin: 0.3rem;  
padding: 0.3em 0.5em;  
border: 1px solid  
#44444444; border-radius:  
5px;  
outline: none;  
min-width: 200px;  
font-size: 1.3rem;  
}  
.traditionalLoginContainer .loginButton  
{ background-color: #0070f3;  
font-size: 1.6rem;  
padding: 0.2em 0.8em;  
color: white;  
margin: 0.4rem;  
border: none;  
border-radius:
```

```
5px;
cursor: pointer;
margin-top: 2rem;
}
.traditionalLoginContainer .loginButton:hover {
background-color: #0071f3d6;
}
.loginWithFireContainer {
display: grid;
display: -ms-grid;
place-items: center;
}
.fire {
background-color: #f8f9fa;
border: 1px solid
#3c404321; border-radius:
4px;
color: #3c4043;
font-family: arial, sans-serif;
margin: 11px 4px;
padding: 0.4em
0.8em; line-height:
27px;
min-width: 54px;
text-align: center;
cursor: pointer;
user-select:
none; font-size:
1.3rem;
font-weight: 500;
}
.hyperLink {
text-decoration: none;
text-align: center;
font-size: 1.2rem;
color: #0070f3;
font-weight: 400;
}
@media screen and (max-width: 480px) {
.loginContainer {
border: none;
box-shadow: none;
min-width:
fit-content;
min-width: -moz-fit-content;
min-width: -webkit-fill-available;
padding: 1rem;
}
}
```

CODE FOR REGISTRATION 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">
<link rel="stylesheet" href="/css/login.css">
<title>Sign Up</title>
<script>
if (window.location.hostname !== "localhost")
{ if (location.protocol !== "https:") {
location.replace(
`https:${location.href.substring(
location.protocol.length
)}`)}
)
}
}
</script>
<script src="./localforage.js"></script>
</head>
<body>
<div class="wrapper">
<div class="loginContainer">
<span>Login to Continue</span>
<div class="traditionalLoginContainer">
<form class="signupForm" action="/" method="post">
<input type="text" name="firstName" placeholder="First Name" id="firstName">
<input type="text" name="lastName" placeholder="Last Name" id="lastName">
<input type="text" name="username" placeholder="User Name" id="username">
<input type="email" name="email" placeholder="Email" id="email">
<input type="password" name="password" placeholder="Password" id="password">
<input class="loginButton" type="submit" value="Sign Up">
</form>
</div>
<div class="loginWithFireContainer">
<button type="button" class="fire" title="Login with SAFETY" id="fire">Login with
SAFETY</button>
</div>
<a class="hyperLink" href="/login">Already have an Account? Login ↗</a>
</div>
</div>
<script>
// Necessary for Fire OAuth to Function
const fireBroadcastingChannel = new
BroadcastChannel('fireOAuthChannel');
fireBroadcastingChannel.addEventListener('message', async event => {
let data = event.data
/**
 * @typedef {Object<string, any>} Data
 * @property {boolean} success - Whether the login was successful
 * @property {string} token - The data returned from the login i.e. Fire Token
 */
// data.token is the message sent from the fireOAuthChannel after verification
// data.success is a boolean that indicates whether the verification was successful
// data.token is the fire token
// What to do with the Fire Token?
// * Fire Token is an unique token which uniquely identifies the user who authorized your login attempt
```

```

with Fire
// * You can use this token ONLY ONCE as it will be destroyed after the first use
// 1. Send the fire token to the Fire Server to verify the user
// - You can do that client sided or server sided
// - You need to send a POST Request to the Fire Server with the fire token
// at the URL: http://localhost:3003/api/tokens/verify
// - The Fire Server will verify the fire token and return a response
// - If the verification was successful - CODE (200), the Fire Server will return a response with
the user's data
// - If the verification was unsuccessful - CODE (400) or CODE (401), the Fire Server will return
a response with an error 'message'
// - You can use the data returned from the Fire Server to create a new user in your database
// This example will send the token to Fire Servers and console.log the response
console.log("%c" + `Fire Token: ${data.token}` , `color: #f1c40f; font-weight: bold;`);
const response = await fetch('https://fire.adaptable.app/api/tokens/verify', {
method: 'POST',
headers: {
'Content-Type': 'application/json'
},
body:
JSON.stringify({
token: data.token
})
})
// get the response
const responseData = await response.json()
// console.log the response
console.log(responseData)
await localforage.setItem('userData', {...responseData, isFire: true})
// Adding the user data to the user Database
let database = await localforage.getItem("userDatabase")
if (database == null) {
database = []
}
database.push(responseData)
await localforage.setItem("userDatabase", database)
// redirect to the home
page window.location.href
= '/'
})
function popupwindow(url, title, w, h) {
var left = (screen.width/2)-(w/2);
var top = (screen.height/2)-(h/2);
return window.open(url, title, 'toolbar=no, location=no, directories=no, status=no, menubar=no,
scrollbars=no, resizable=no, copyhistory=no, width=' + w + ', height=' + h + ', top=' + top + ', left=' + left);
}
document.getElementById("fire").addEventListener("click", function() {
popupwindow("/fireoauth.html", "Fire OAuth", 450, 600)
})
</script>
<script>
// this Website's Scripts / App Logic
document.querySelector(".signupForm").addEventListener("submit", async (e) => {
e.preventDefault()
let firstName = document.getElementById("firstName").value
let lastName = document.getElementById("lastName").value
let username =
document.getElementById("username").value
let email = document.getElementById("email").value
let password =

```

```
document.getElementById("password").value let profilePic =  
`https://avatars.dicebear.com/api/adventurerneutral/${  
firstName}${lastName}.svg?backgroundColor=variant03`  
let data = { firstName, lastName, username, email, password, profilePic }  
await localforage.setItem("userData", data)  
let database = await localforage.getItem("userDatabase")  
if (database == null) {  
database = []  
}  
database.push(data)  
await localforage.setItem("userDatabase", database)  
window.location.href = "/"  
})  
</script>  
</body>  
</html>
```