

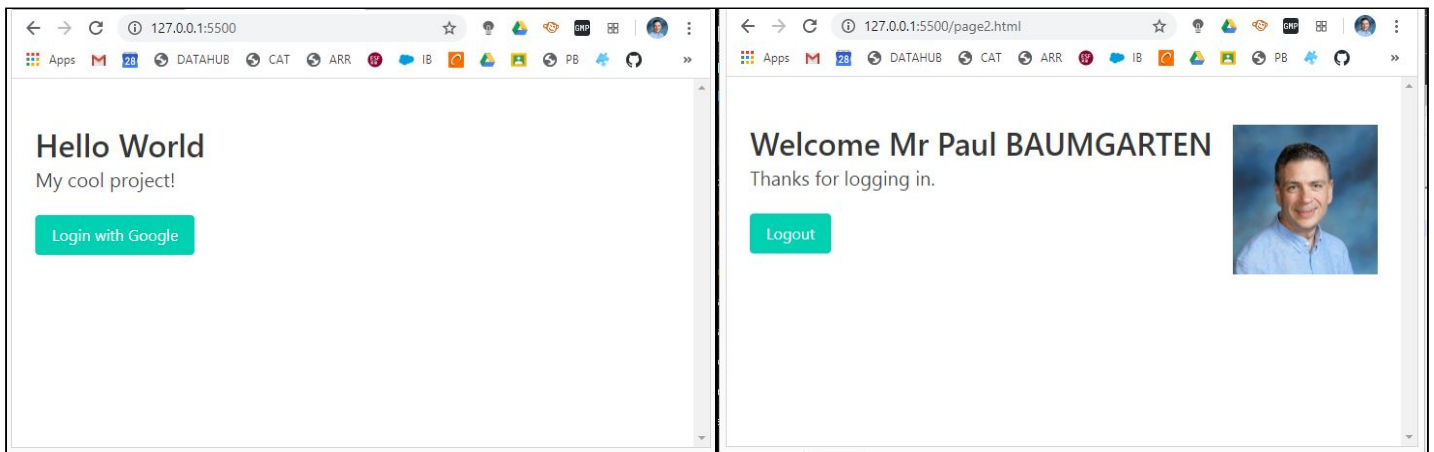
Firestore authentication guide

As of 28/04/2020

End goal

Two pages:

- index.html that is the welcome page with the login button
- page2.html that contains our project functionality once logged in




Setup Firestore

1. Log in to firebase.google.com
2. Create project
3. Register web app within the project
4. Enable Google authentication
5. Add 127.0.0.1 as an authorised domain
6. Copy the firebase API keys into your HTML
7. Copy the Firebase JS SDK script loads into your HTML (eg: `firebase-auth.js`)


index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
          href="https://cdn.jsdelivr.net/npm/bulma@0.8.2/css/bulma.min.css">
    <script defer src="https://use.fontawesome.com/releases/v5.3.1/js/all.js"></script>
  </head>
  <body>
    <section class="section">
      <div class="container">
        <h1 class="title">
          Hello World
        </h1>
        <p class="subtitle">
          My cool project!
        </p>
        <button class="button is-primary" id="login" onclick="login();">
          Login with Google
        </button>
      </div>
    </section>
  </body>
  <script src="https://www.gstatic.com/firebasejs/7.14.2/firebase-app.js"></script>
  <script src="https://www.gstatic.com/firebasejs/7.14.2/firebase-auth.js"></script>
  <script src="https://www.gstatic.com/firebasejs/7.14.2/firebase-firestore.js"></script>
  <script>
    // Your web app's Firebase configuration
    var firebaseConfig = {
      apiKey: "--- as provided by firebase ---",
      authDomain: "--- as provided by firebase ---",
      databaseURL: "--- as provided by firebase ---",
      projectId: "--- as provided by firebase ---",
      storageBucket: "--- as provided by firebase ---",
      messagingSenderId: "--- as provided by firebase ---",
      appId: "--- as provided by firebase ---"
    };
    // Initialize Firebase
    firebase.initializeApp(firebaseConfig);
  </script>
  <script src="index.js"></script>
</html>
```


Execute the login() function
when button clicked.




Load firebase apps



Firebase API
settings as provided



Load your index.js



page2.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bulma@0.8.2/css/bulma.min.css">
    <script defer src="https://use.fontawesome.com/releases/v5.3.1/js/all.js"></script>
    <style>
      /* Styling the photo element*/
      img#profilePic {
        position: absolute; /* Force location on page */
        top: 0;             /* At top of page */
        right: 0;           /* At right of page */
        width: 150px;       /* Force size to 150px */
        height: 150px;
      }
    </style>
  </head>
  <body>
    <section class="section">
      <div class="container">
        <h1 class="title" id="welcome">
          Welcome!
        </h1>
        <p class="subtitle">
          Thanks for logging in.
        </p>
        <img src="" id="profilePic">
        <button class="button is-primary" id="logout" onclick="logout();">
          Logout
        </button>
      </div>
    </section>
  </body>

  <script src="https://www.gstatic.com/firebasejs/7.14.2/firebase-app.js"></script>
  <script src="https://www.gstatic.com/firebasejs/7.14.2/firebase-auth.js"></script>
  <script src="https://www.gstatic.com/firebasejs/7.14.2/firebase-firestore.js"></script>
  <script>
    // Your web app's Firebase configuration
    var firebaseConfig = {
      apiKey: "--- as provided by firebase ---",
      authDomain: "--- as provided by firebase ---",
      databaseURL: "--- as provided by firebase ---",
      projectId: "--- as provided by firebase ---",
      storageBucket: "--- as provided by firebase ---",
      messagingSenderId: "--- as provided by firebase ---",
      appId: "--- as provided by firebase ---"
    };
    // Initialize Firebase
    firebase.initializeApp(firebaseConfig);
  </script>

  <script src="index.js"></script>
</html>
```

Execute the logout() function
when button clicked.



Load firebase apps

Firebase API
settings as provided

Load your index.js

index.js

```
"use strict";    // Mandate variables to be declared

function login() {
    console.log("login");
    /* Trigger the firebase signIn functions */
    let provider = new firebase.auth.GoogleAuthProvider();
    firebase.auth().signInWithRedirect(provider);
}

function logout() {
    /* Trigger the firebase signOut() function */
    firebase.auth().signOut().then(function() {
        /* Go to the index page when finished */
        if (document.location.pathname !== "/" ) {
            document.location = "/";
        }
    });
}

function loggedIn() {
    /*
    loggedIn()
    Will be run by every page when it has finished loading if we are logged in
    */

    /* Get the user profile of our logged in user */
    let user = firebase.auth().currentUser;

    if (document.location.pathname === "/") {
        /* Since we are logged in, move off the index page, go to page 2 */
        document.location = "/page2.html";
    } else if (document.location.pathname === "/page2.html") {
        /* We are at page 2, let's display information about our user */
        document.querySelector("#welcome").innerHTML = "Welcome "+user.displayName;
        let img = document.querySelector("#profilePic");
        img.src = user.photoURL;
    }
}

function main() {
    console.log("index.js/main running...");
    /*
    onAuthStateChanged()
    will run everytime our authentication state changes,
    meaning every time we become logged in, or logged out.
    */
    firebase.auth().onAuthStateChanged(function(user) {
        console.log("onAuthStateChanged", user);
        if (user) { /* If we are logged in */
            /* Let the loggedIn() function do the work */
            loggedIn();
        } else { /* If we are not logged in */
            /* Go to the index page if we aren't there already */
            if (document.location.pathname !== "/" ) {
                document.location = "/";
            }
        }
    });
}

/* When the web browser has finished loading everything, run our main() function */
window.onload=main;
```