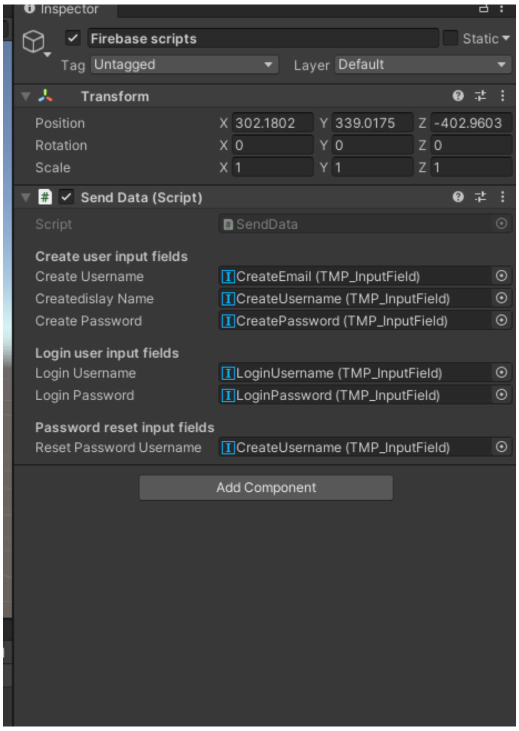
README Firebase connection

Build to use

Build the 'Firebase connection Example' to see the results and how to use the firebase connection.
Make sure you play the build on a online server or a localhost. The communication between Firebase and WebGL will not work otherwise.

What functions to use

The values of the inputfield are directly parsed through. You can change the input field with your own or change the code in SendData.cs to your own values.



☑ Firebase scripts
Tag Untagged
Layer Default

Position X 302.1802 Y 339.0175 Z -402.9603
Rotation X 0 Y 0 Z 0
Scale X 1 Y 1 Z 1

Script SendData

Create user input fields
Create Username CreateEmail (TMP_InputField)
Createdislay Name CreateUsername (TMP_InputField)
Create Password CreatePassword (TMP_InputField)

Login user input fields
Login Username LoginUsername (TMP_InputField)
Login Password LoginPassword (TMP_InputField)

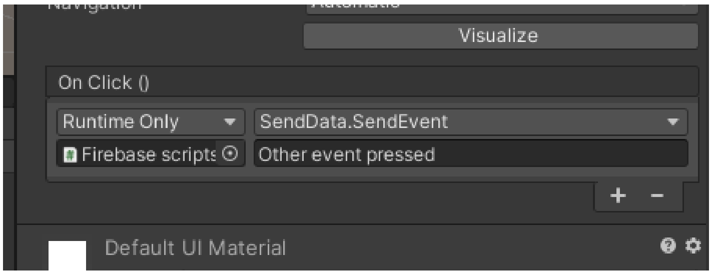
Password reset input fields
Reset Password Username CreateUsername (TMP_InputField)

Send Event

```
/// <summary>
/// Send to event to the realtime database in Firebase
/// Set event values to the given eventName and current datetime
/// </summary>
/// <param name="eventName">Set the event name</param>
public void SendEvent(string eventName)
{
string path;
if (!string.IsNullOrEmpty(eventName))
{
DateTime dt = DateTime.Now;
UserEventComponent userEventComponent = new UserEventComponent() {
name = eventName,
dateEventCompleted = dt.ToString("dd-MM-yyyy"),
timeEventCompleted = dt.ToString("hh:mm:ss")
};
path = DatabaseManager.ConstructDatabasePath("Events", userEventComponent.name);
        DatabaseManager.GetAndAdd(path, gameObject.name, "OnPostSuccesfull", "OnPostFailed");

        if (!string.IsNullOrEmpty(userWrap.user.uid))
        {
            path = DatabaseManager.ConstructDatabasePath("All users", userWrap.user.uid, "Events");
            DatabaseManager.PushJSON(path, JsonUtility.ToJson(userEventComponent), gameObject.name, "OnPostSuccesfull", "OnPostFailed"
        }
    }
}
```

This function can be called with a button. In the input field you place the specific name of the event.

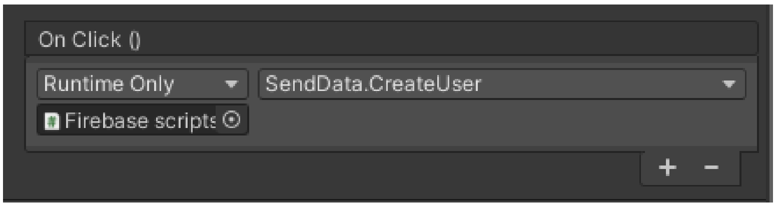


Create user

```
/// <summary>
/// This function does the following steps in the Jslib
/// 1. Add user to the Firebase Authentication with the email and password
/// 2. It updates the user with the given displayName
/// 3. Send a verification email to the given email
/// </summary>
public void CreateUser()
{
    if (string.IsNullOrEmpty(createUsername.text) || string.IsNullOrEmpty(createdislayName.text) || string.IsNullOrEmpty(createPasswor
    {
        Debug.Log("No username or Password entered");
        return;
    }

    if (!IsEmail(createUsername.text))
    {
        Debug.Log("Enter a valid email adress");
        return;
    }

    FirebaseAuth.CreateUserWithEmailAndPassword(createUsername.text, createPassword.text, createdislayName.text, gameObject.name, "Set
}
```

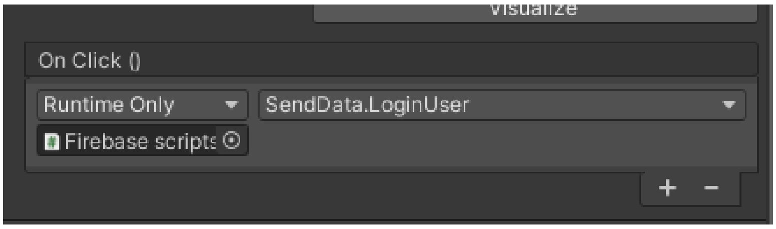


Login user

```
/// <summary>
/// Login the user
/// </summary>
public void LoginUser()
{
    if (string.IsNullOrEmpty(loginUsername.text) || string.IsNullOrEmpty(loginPassword.text))
    {
        Debug.Log("No username or Password entered");
        return;
    }

    if (!IsEmail(loginUsername.text))
    {
        Debug.Log("Enter a  valid email adress");
        return;
    }

    FirebaseAuth.SignInWithEmailAndPassword(loginUsername.text, loginPassword.text,gameObject.name, "SetLoggedInUser", "OnPostFailed")
}
```



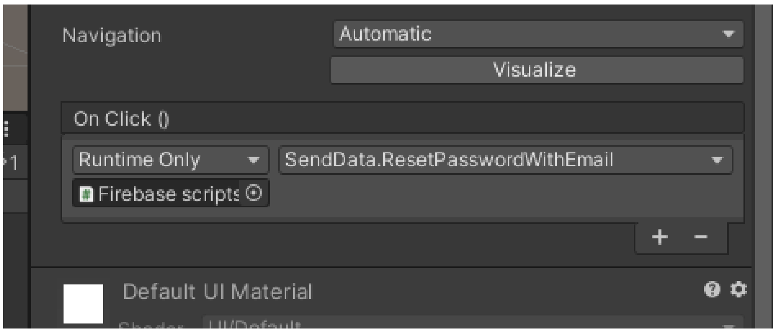
On Click ()

Runtime Only SendData.LoginUser

Firebase scripts

Reset password with email

```
/// <summary>
/// Send password reset link to the given email
/// </summary>
public void ResetPasswordWithEmail() {
    if (string.IsNullOrEmpty(resetPasswordUsername.text)) {
        Debug.Log("No username or Password entered");
        return;
    }
    FirebaseAuth.SendPasswordResetEmail(resetPasswordUsername.text, gameObject.name, "OnPostSuccesfull", "OnPostFailed");
}
```



Navigation Automatic

On Click ()

Runtime Only SendData.ResetPasswordWithEmail

Firebase scripts

Classes

To change the pushed events change:

```
/// <summary>
/// User event preset
/// </summary>
public class UserEventComponent
{
public string name;
public string dateEventCompleted;
public string timeEventCompleted;
}
```

To get more user data, change:

```
/// <summary>
/// User preset from Firbase with values as:
/// UID
/// Email
/// Display name
///
/// Update this class if you want other data from the user
/// </summary>
[System.Serializable]
public class User
{
public string uid;
public string email;
public string displayName;
// You can add other properties if needed
}
```

Hint! If you log in or create a user, a log will display in the DevTools Console of the chrome browser. This will shows all the player data that can be used. For example:

```
Data of the created user: {"user":
{"uid":"c5n4ey8BqgPR4PaGbkguWfDiOeE3","email":"quintijn@easysee.nl","emailVerified":false,"dis
[{"providerId":"password","uid":"quintijn@easysee.nl","displayName":"newuser","email":"quintijn@ea
{"refreshToken":"AMf-vBwaedUfA8jGJctyEgntnc6_mwzbiY4ssIeHUz7eZqjxyptN5UETuF-
wmTLratrLGGBspH8IQgnX6lWbgGLc1mYBjN5iAthJfzAyLKQHPJrLi_m39--
KPOjCGZGfKsHDxaWfTPc9WSCOSgLQITj0AIRGzEPYs8iehG9hZo233JB2OQQ1i63NzF7C0RfuZ
aQ","accessToken":"eyJhbGciOiJSUzI1NiIsImtpZCI6ImNmM2I1YWRhM2NhMzkxNTQ4ZDM1OTJi
O9eaWoUXfDW12doJpshC_jLzMOG-
uH15ClXT3cYUaskXAoMsvR9CY7_WH8r6JzOAk0qvMUHizbxmP9SjIxBo53Y5ru2hBnEEMoNwuO
JMgsKIIZmmOxcQcmPi4pEBjDUvhYjhRnVqd2PuHHrxT4xBCECNYQCb_jsz1pNdz_jJWNBrPaOM
[DEFAULT]"},"providerId":null,"_tokenResponse":
{"kind":"identitytoolkit#SignupNewUserResponse","idToken":"eyJhbGciOiJSUzI1NiIsImtpZCI6ImNm
O9eaWoUXfDW12doJpshC_jLzMOG-
uH15ClXT3cYUaskXAoMsvR9CY7_WH8r6JzOAk0qvMUHizbxmP9SjIxBo53Y5ru2hBnEEMoNwuO
JMgsKIIZmmOxcQcmPi4pEBjDUvhYjhRnVqd2PuHHrxT4xBCECNYQCb_jsz1pNdz_jJWNBrPaOM
vBwaedUfA8jGJctyEgntnc6_mwzbiY4ssIeHUz7eZqjxyptN5UETuF-
wmTLratrLGGBspH8IQgnX6lWbgGLc1mYBjN5iAthJfzAyLKQHPJrLi_m39--
KPOjCGZGfKsHDxaWfTPc9WSCOSgLQITj0AIRGzEPYs8iehG9hZo233JB2OQQ1i63NzF7C0RfuZ
aQ","expiresIn":"3600","localId":"c5n4ey8BqgPR4PaGbkguWfDiOeE3"},"operationType":"signIn"}
(Filename: ./Runtime/Export/Debug/Debug.bindings.h Line: 39)
```

NOTE!!!

When building the WebGL project, make sure the following script is added to the 'index.html' file.

After

```
var unityInstance = UnityLoader.instantiate("unityContainer", "Build/www.json", {onProgress: UnityProgress});
```

add

```
window.unityInstance = unityInstance;
```

After </html> add

```
<script type="module">
    // Import the functions you need from the SDKs you need
    import { initializeApp } from "https://www.gstatic.com/firebasejs/9.22.0/firebase-app.js";
    import { getAnalytics } from "https://www.gstatic.com/firebasejs/9.22.0/firebase-analytics.js";
    import { getDatabase, ref, onValue, set, push, update, onChildAdded, onChildChanged, onChildRemoved, runTransaction } from "https:
    import { getFirestore, collection, doc, getDocs, getDoc } from "https://www.gstatic.com/firebasejs/9.22.0/firebase-firestore.js";
    import { getAuth, createUserWithEmailAndPassword, signInWithEmailAndPassword, updateProfile, onAuthStateChanged, sendEmailVerifica
    import { getStorage } from "https://www.gstatic.com/firebasejs/9.22.0/firebase-storage.js";
    // Your web app's Firebase configuration
    const firebaseConfig = {
        apiKey: "AIzaSyBesjP8FCNGDcg0Pt_fKW9m88GPWr76b4k",
        authDomain: "fir-webgl-1b296.firebaseapp.com",
        databaseURL: "https://fir-webgl-1b296-default-rtdb.europe-west1.firebasedatabase.app",
        projectId: "fir-webgl-1b296",
        storageBucket: "fir-webgl-1b296.appspot.com",
        messagingSenderId: "945978901286",
        appId: "1:945978901286:web:a3edbde57e7910ef3af7e7",
        measurementId: "G-T8DKME89QK"
    };
    // Initialize Firebase
    const firebase = initializeApp(firebaseConfig);
    const analytics = getAnalytics(firebase);
    const database = getDatabase(firebase);
    const firestore = getFirestore(firebase);
    const auth = getAuth(firebase);
    const storage = getStorage(firebase);

    const firebaseRef = ref;
    const firebaseTransaction = runTransaction;
    const firebaseOnValue = onValue;
    const firebaseSet = set;
    const firebasePush = push;
    const firebaseUpdate = update;
    const firebaseOnChildAdded = onChildAdded;
    const firebaseOnChildChanged = onChildChanged;
    const firebaseOnChildRemoved = onChildRemoved;

    const firebaseOnAuthStateChanged = onAuthStateChanged;
    const firebaseCreateUserWithEmailAndPassword = createUserWithEmailAndPassword;
    const firebaseSignInWithEmailAndPassword = signInWithEmailAndPassword;
    const firebaseSendEmailVerification = sendEmailVerification; sendPasswordResetEmail
    const firebaseSendPasswordResetEmail = sendPasswordResetEmail;
    const firebaseUpdateProfile = updateProfile;

    const firestoreCol = collection;
    const firestoreGetDocs = getDocs;
    const firestoreDoc = doc;
    const firestoreGetDoc = getDoc;

    // Attach firebase to window object to use it in global scope
    window.firebase = firebase;
    window.database = database;
    window.storage = storage;
    window.auth = auth;
    window.firestore = firestore;

    window.firebaseRef = firebaseRef;
    window.firebaseOnValue = firebaseOnValue;
    window.firebaseSet = firebaseSet;
    window.firebasePush = firebasePush;
    window.firebaseUpdate = firebaseUpdate;

    window.firebaseOnAuthStateChanged = firebaseOnAuthStateChanged;
    window.firebaseCreateUserWithEmailAndPassword = firebaseCreateUserWithEmailAndPassword;
    window.firebaseSignInWithEmailAndPassword = firebaseSignInWithEmailAndPassword;
    window.sendEmailVerification = firebaseSendEmailVerification;
    window.firebaseSendPasswordResetEmail = firebaseSendPasswordResetEmail;
    window.updateProfile = firebaseUpdateProfile;

    window.firebaseOnChildAdded = firebaseOnChildAdded;
    window.firebaseOnChildChanged = firebaseOnChildChanged;
    window.firebaseOnChildRemoved = firebaseOnChildRemoved;
    window.firebaseTransaction = firebaseTransaction;

    window.firestoreGetDocs = firestoreGetDocs;
    window.firestoreCol = firestoreCol;
    window.firestoreDoc = firestoreDoc;
    window.firestoreGetDoc = firestoreGetDoc;
</script>
```