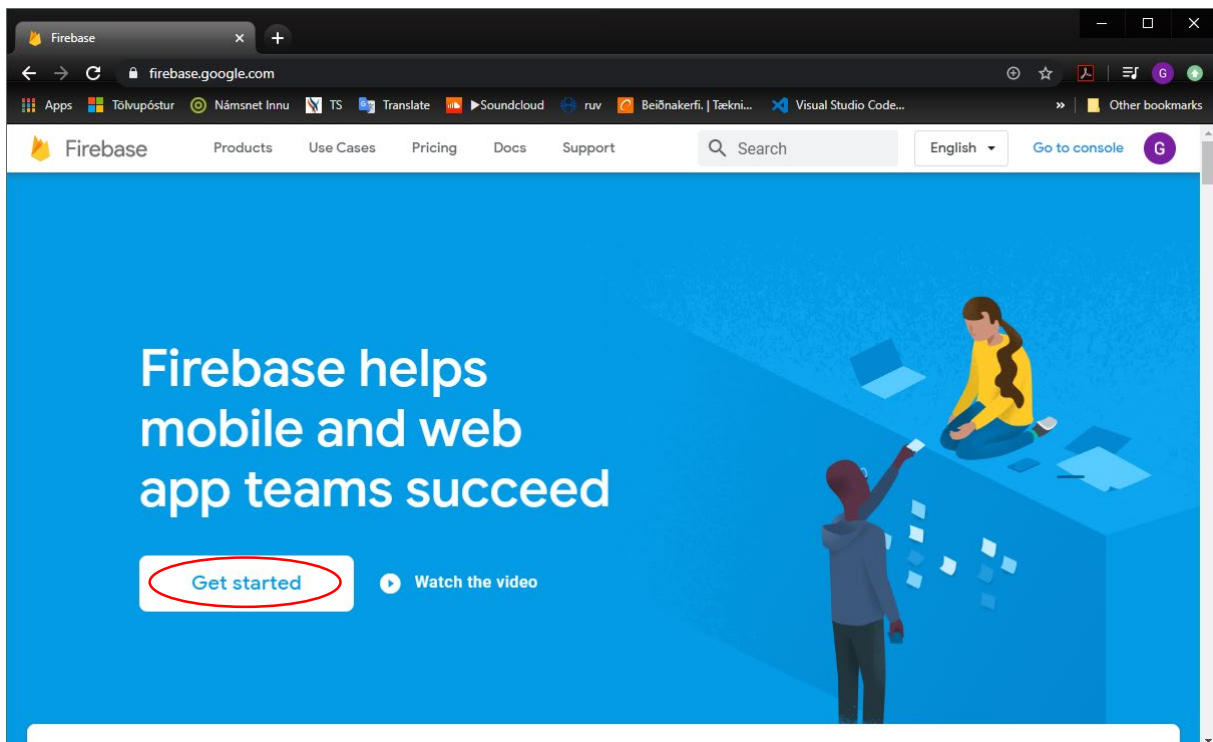
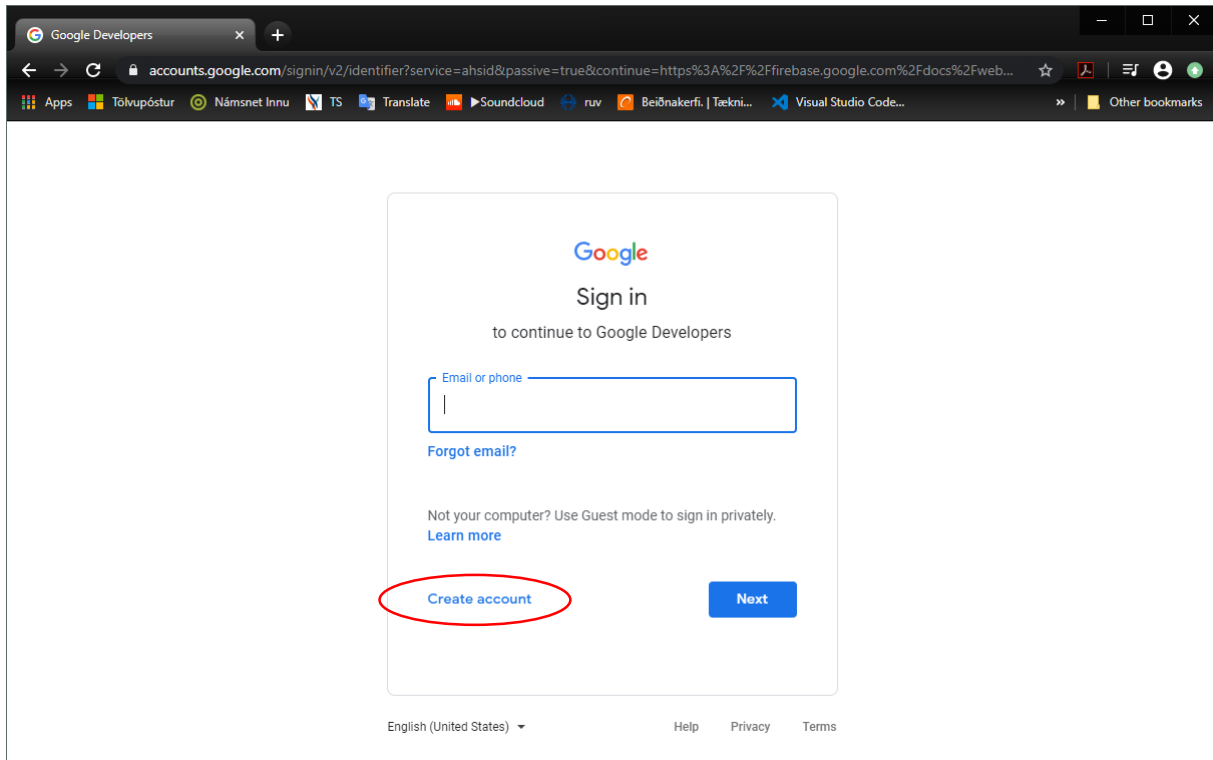


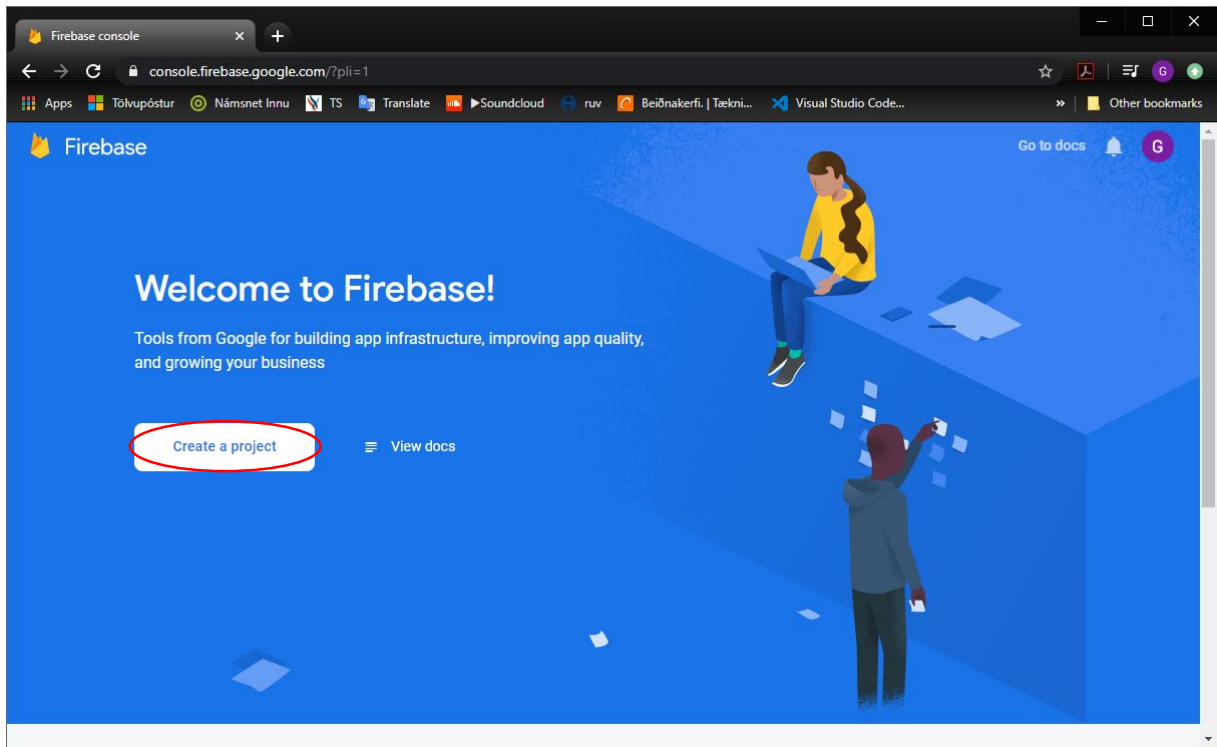
Firestore gagnagrunnur

Nemendur verða að skrá sig (*google account*), búðu til reikning ef þú ert ekki með hann.

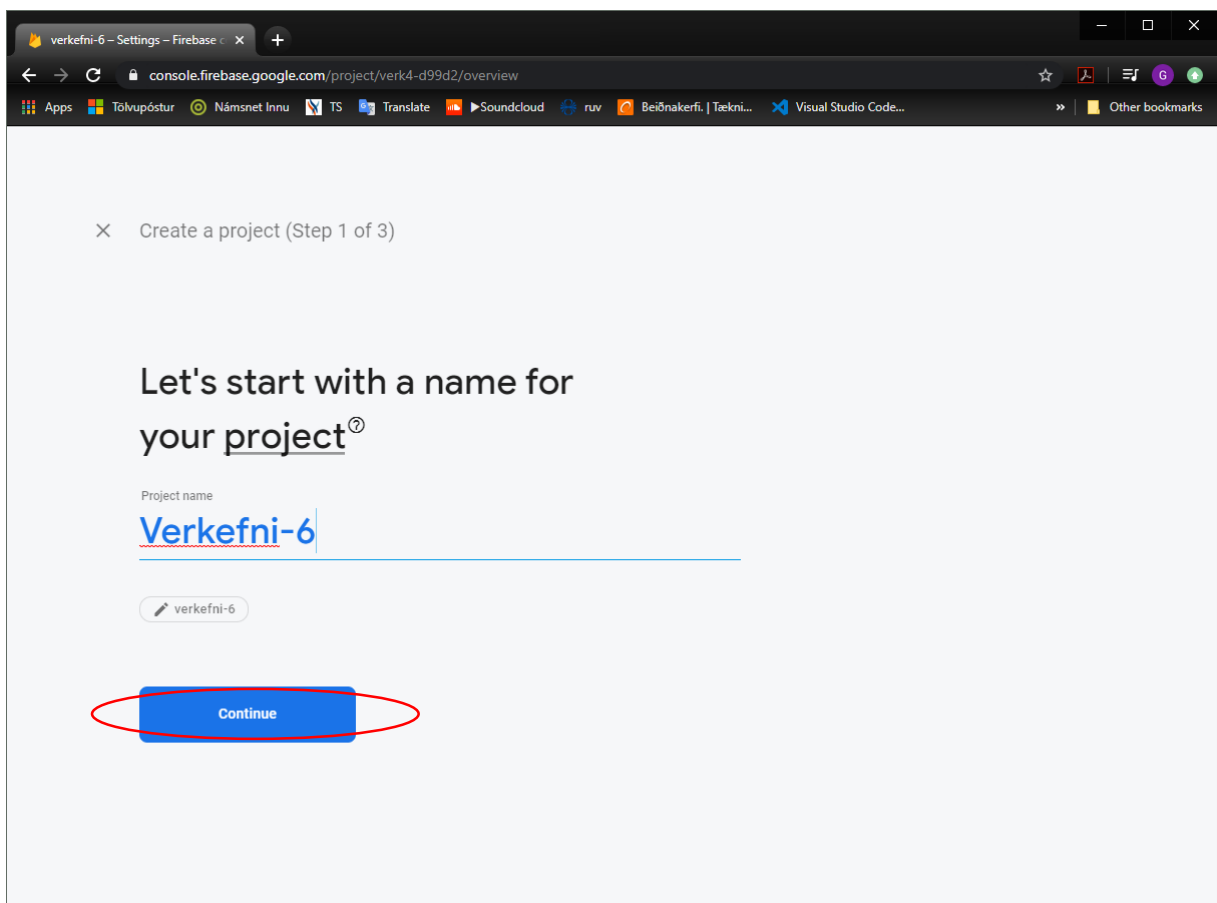


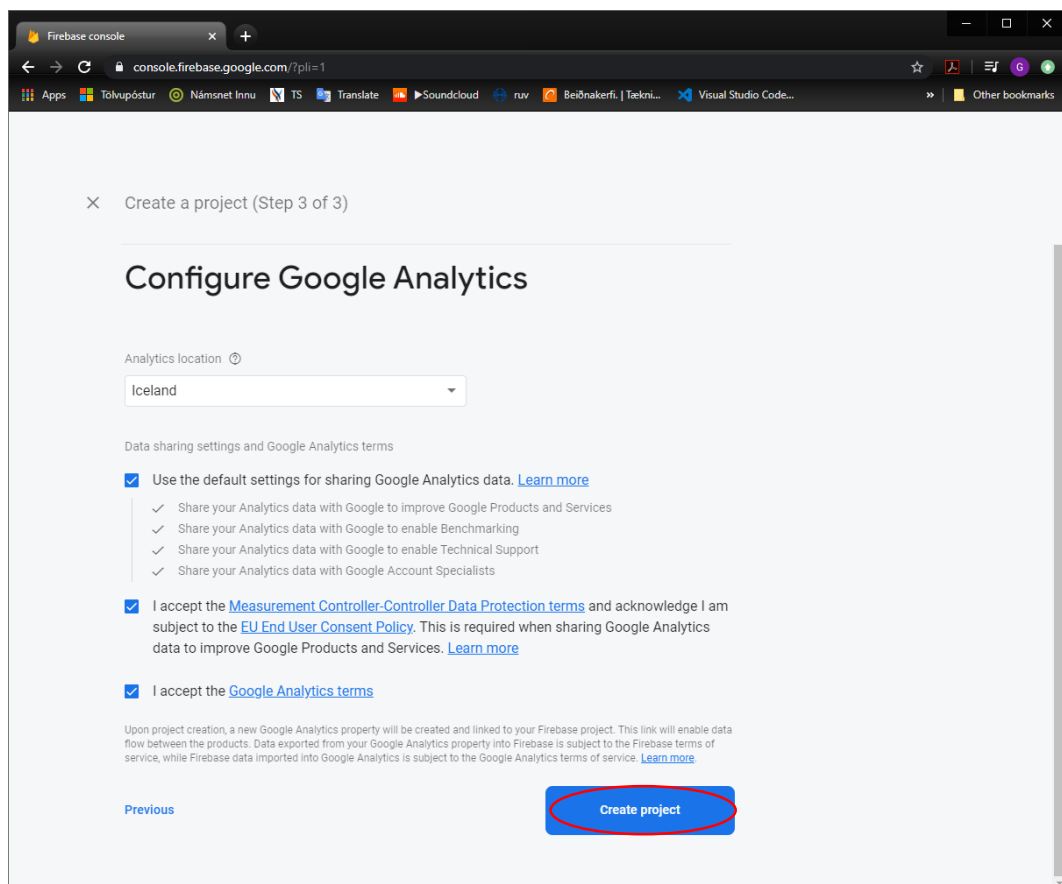
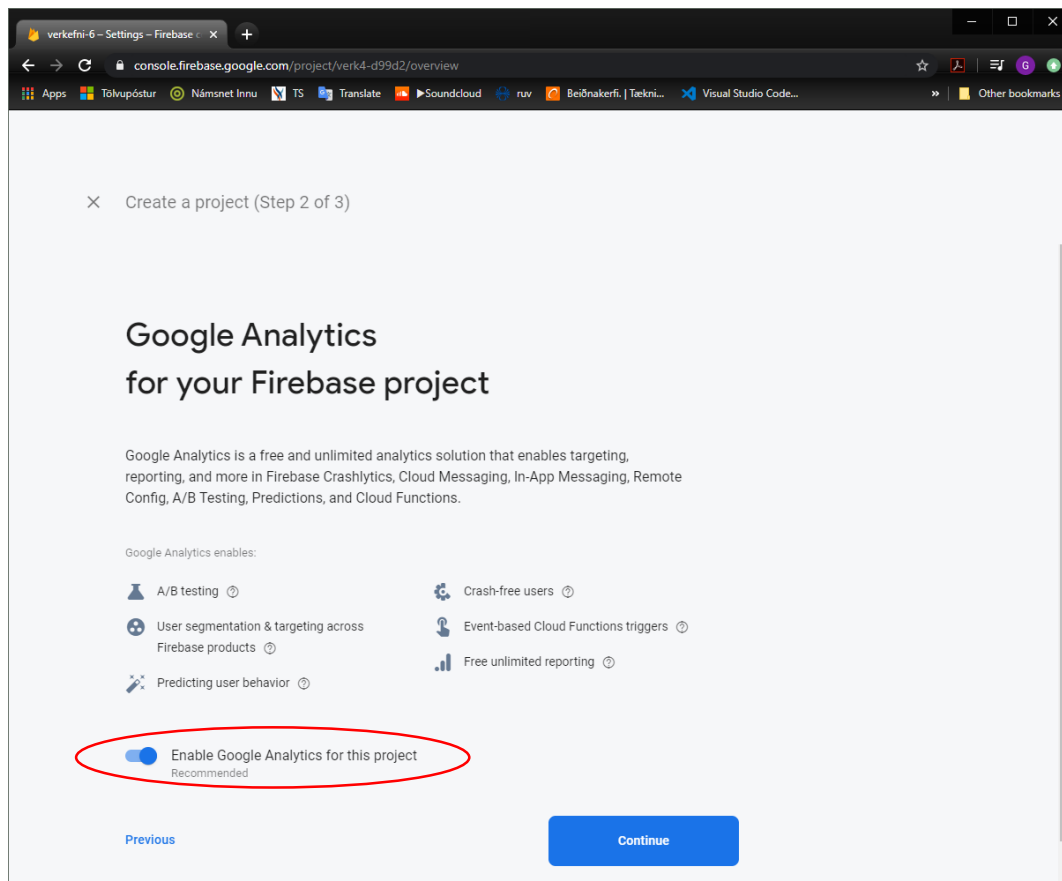
Firebase Authentication with Python including Flask API

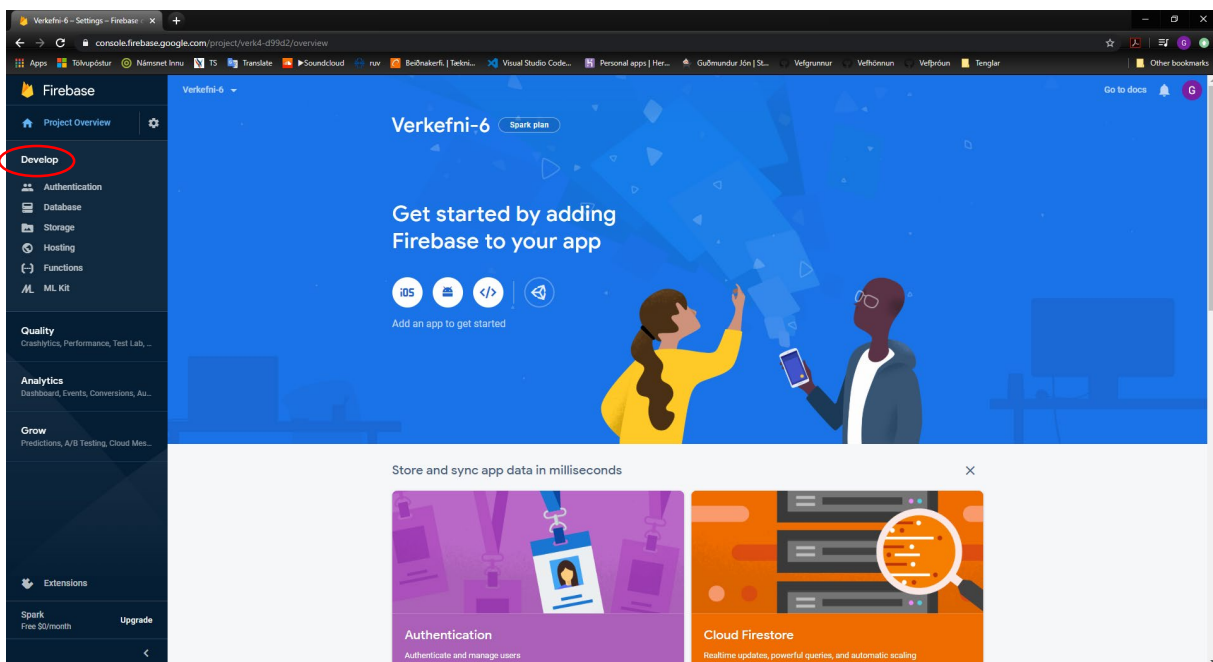
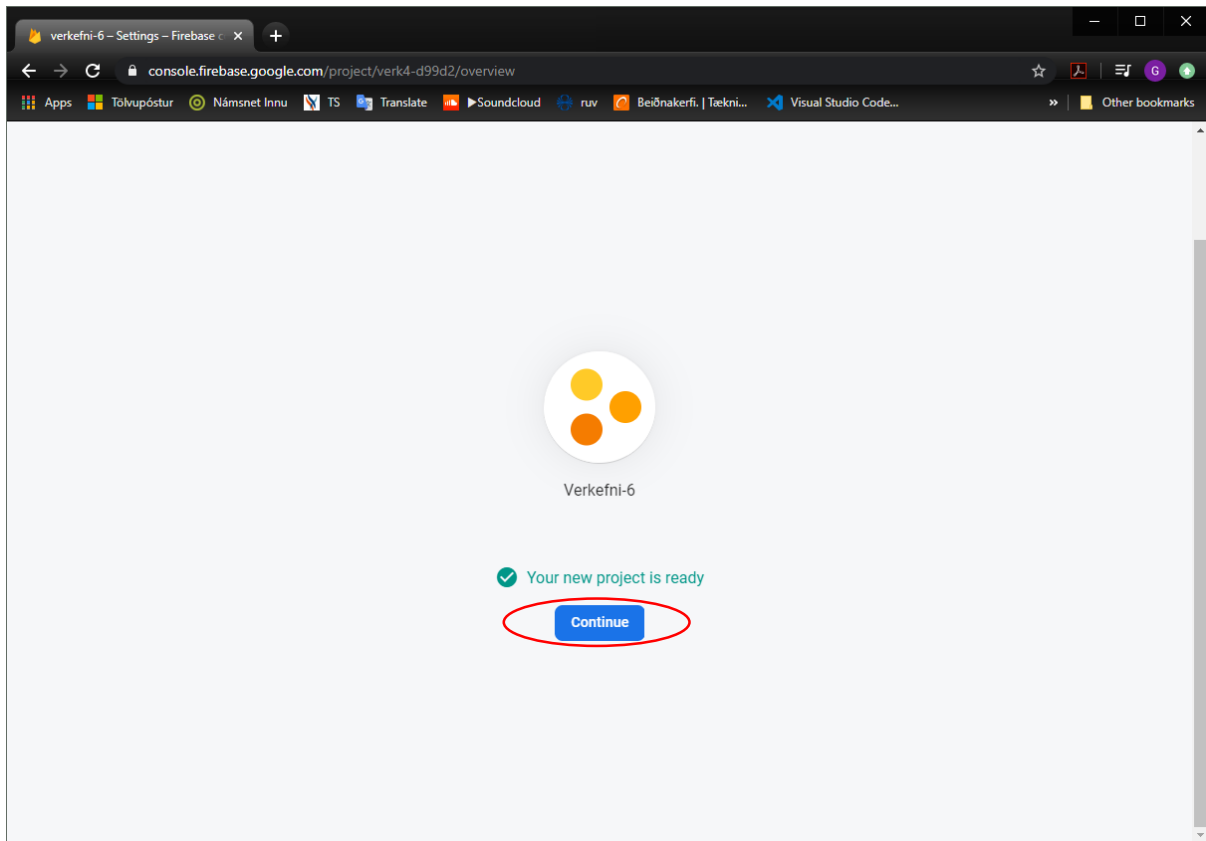
<https://www.youtube.com/watch?v=FCw5PFD99k>

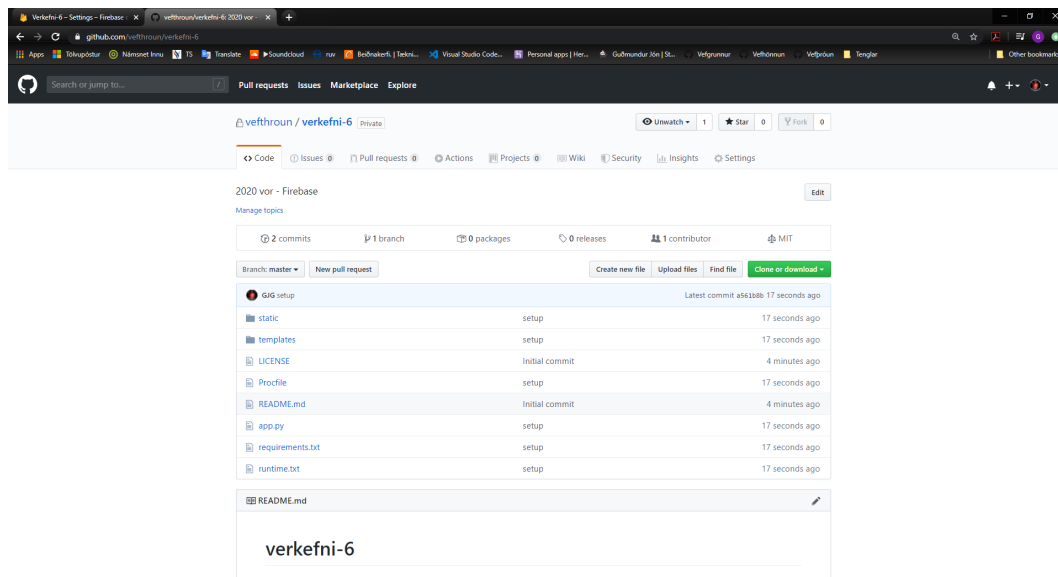


Ath! Á að vera verkefni-5









Setjið upp github geymslu með tilheyrandi viðbótum fyrir Heroku og setjið á „local“ tölvu.

Opnum CMD

```

C:\Users\g\g\Desktop\VEF2VF>cd env/scripts/
C:\Users\g\g\Desktop\VEF2VF\env\Scripts>activate
(env) C:\Users\g\g\Desktop\VEF2VF\env\Scripts>pip install pyrebase4

```

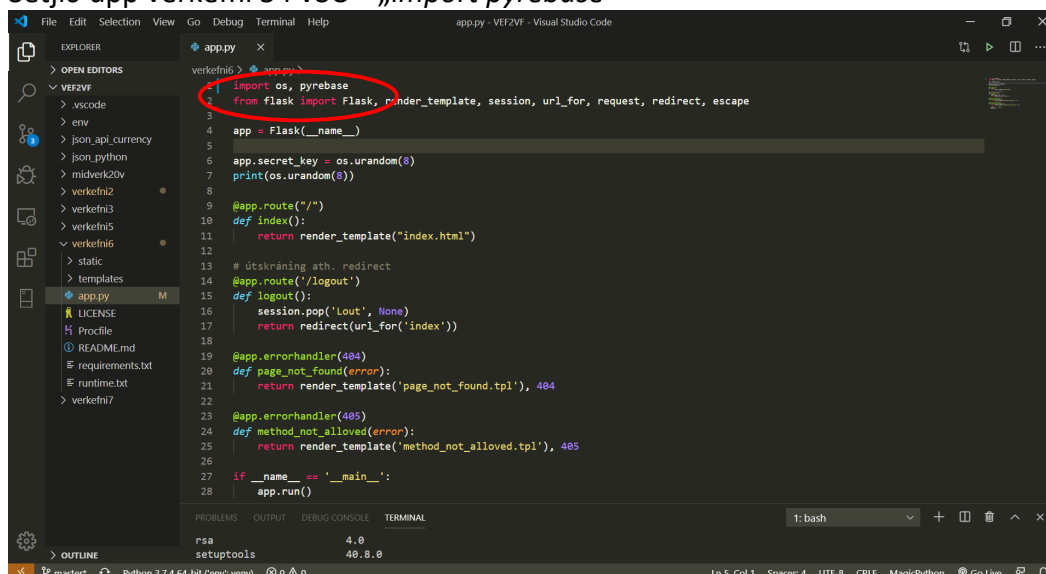
pip install pyrebase4 og pip install pycryptodome

```

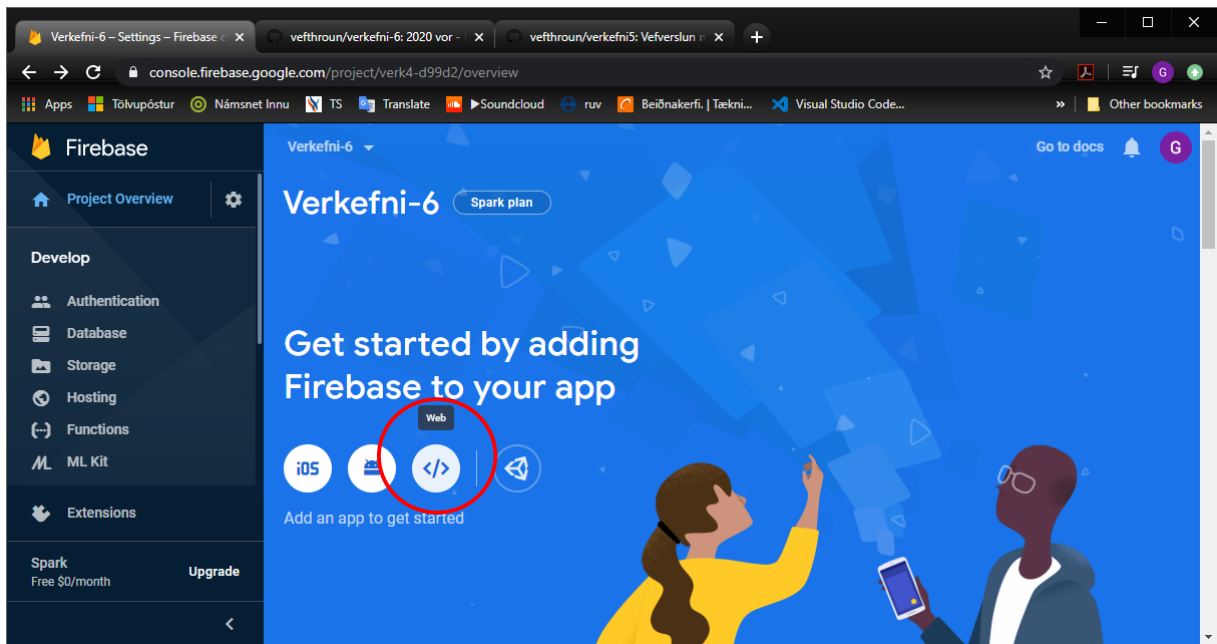
Running setup.py install for gcloud ... done
Running setup.py install for jws ... done
Successfully installed certifi-2019.11.28 chardet-3.0.4 gcloud-0.18.3 googleapis-common-protos-1.51.0 httplib2-0.17.0 id
na-2.9 jws-0.1.3 oauth2client-4.1.2 protobuf-3.11.3 pyasn1-0.4.8 pyasn1-modules-0.2.8 pycryptodome-3.9.7 pyrebase4-4.3.0
python-jwt-2.0.1 requests-2.23.0 requests-toolbelt-0.9.1 rsa-4.0 six-1.14.0 urllib3-1.25.8
WARNING: You are using pip version 19.2.3, however version 20.0.2 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' command.
(env) C:\Users\g\g\Desktop\VEF2VF\env\Scripts>pip install pycryptodome

```

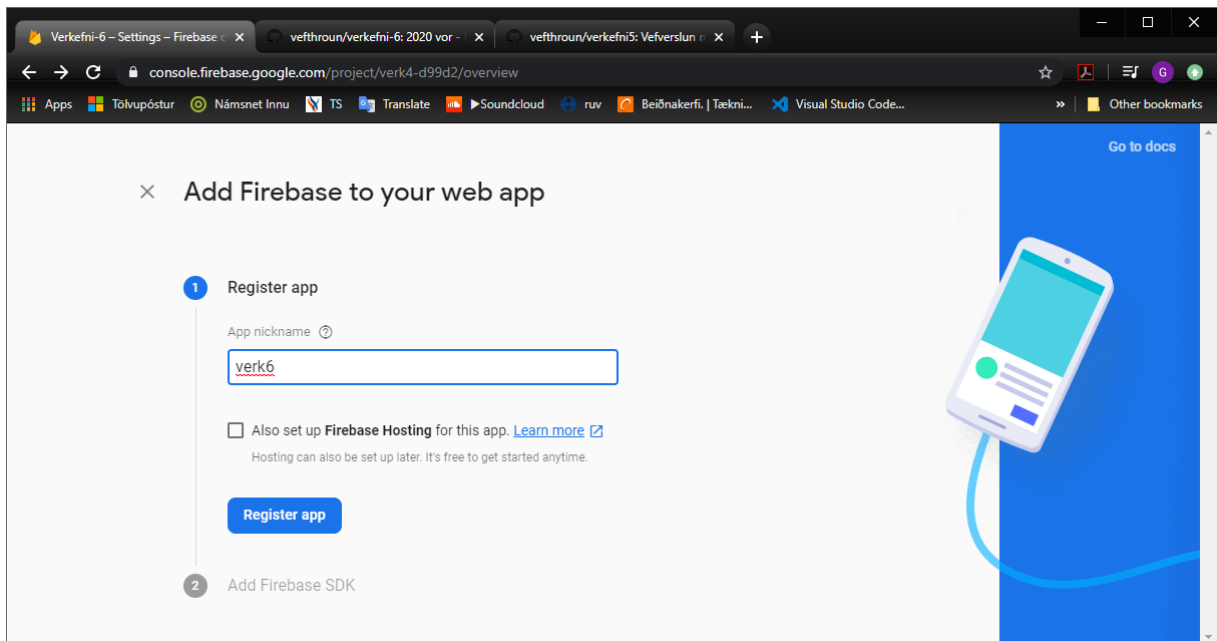
Setjið upp verkefni 5 í VSC – „import pyrebase“



Aftur í firebase



Veljið „</>“



Register app

Verkefni-6 – Settings – Firebase × vefthroun/verkefni-6: 2020 vor × vefthroun/verkefni5: Vefverslun × +

console.firebase.google.com/project/verk4-d99d2/overview

Apps Tölvupóstur Námsnet Innu TS Translate Soundcloud ruv Beiðnakerfi, | Tækni... Visual Studio Code... Other bookmarks

✓ Register app

2 Add Firebase SDK

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firebase services:


```
<!-- The core Firebase JS SDK is always required and must be listed first -->
<script src="https://www.gstatic.com/firebasejs/7.10.0/firebase-app.js"></script>

<!-- TODO: Add SDKs for Firebase products that you want to use
https://firebase.google.com/docs/web/setup#available-libraries -->
<script src="https://www.gstatic.com/firebasejs/7.10.0/firebase-analytics.js"></script>

<script>
  // Your web app's Firebase configuration
  var firebaseConfig = {
    apiKey: "AIzaSyBWSsk7gszZ7F9Yq50TrxkZBpYUYR30JSc",
    authDomain: "verk4-d99d2.firebaseio.com",
    databaseURL: "https://verk4-d99d2.firebaseio.com",
    projectId: "verk4-d99d2",
    storageBucket: "verk4-d99d2.appspot.com",
    messagingSenderId: "997403664419",
    appId: "1:997403664419:web:b05dfd0058f2d6eebd9196",
    measurementId: "G-D4FVDFQ1YV"
  };
  // Initialize Firebase
  firebase.initializeApp(firebaseConfig);
  firebase.analytics();
</script>
```

Learn more about Firebase for web: [Get Started](#), [Web SDK API Reference](#), [Samples](#)

Continue to console



Verkefni-6 – Settings – Firebase × vefthroun/verkefni-6: 2020 vor × vefthroun/verkefni5: Vefverslun × +

console.firebase.google.com/project/verk4-d99d2/overview

Apps Tölvupóstur Námsnet Innu TS Translate Soundcloud ruv Beiðnakerfi, | Tækni... Visual Studio Code... Other bookmarks

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firebase services:


```
<!-- The core Firebase JS SDK is always required and must be listed first -->
<script src="https://www.gstatic.com/firebasejs/7.10.0/firebase-app.js"></script>

<!-- TODO: Add SDKs for Firebase products that you want to use
https://firebase.google.com/docs/web/setup#available-libraries -->
<script src="https://www.gstatic.com/firebasejs/7.10.0/firebase-analytics.js"></script>

<script>
  // Your web app's Firebase configuration
  var firebaseConfig = {
    apiKey: "AIzaSyBWSsk7gszZ7F9Yq50TrxkZBpYUYR30JSc",
    authDomain: "verk4-d99d2.firebaseio.com",
    databaseURL: "https://verk4-d99d2.firebaseio.com",
    projectId: "verk4-d99d2",
    storageBucket: "verk4-d99d2.appspot.com",
    messagingSenderId: "997403664419",
    appId: "1:997403664419:web:b05dfd0058f2d6eebd9196",
    measurementId: "G-D4FVDFQ1YV"
  };
  // Initialize Firebase
  firebase.initializeApp(firebaseConfig);
  firebase.analytics();
</script>
```

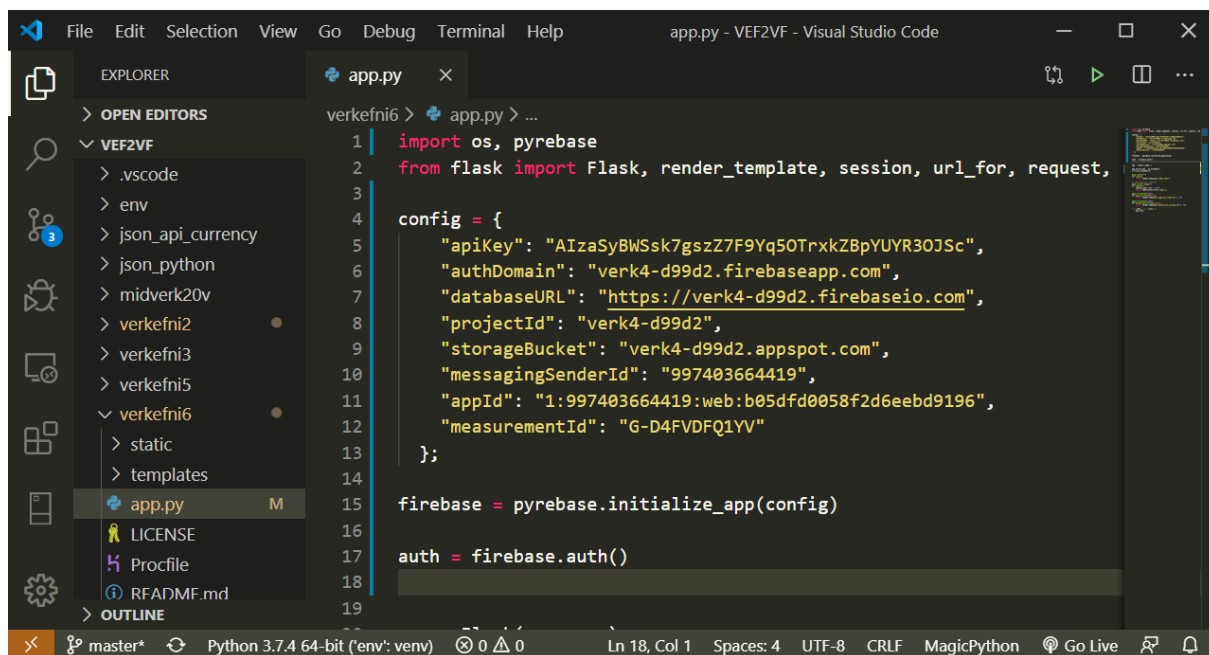
Learn more about Firebase for web: [Get Started](#), [Web SDK API Reference](#), [Samples](#)

Continue to console



Aritið `firebaseConfig`

og setjið í appið (bætið við gæsalöppum „K“:“V“)



```
1 import os, pyrebase
2 from flask import Flask, render_template, session, url_for, request,
3
4 config = {
5     "apiKey": "AIzaSyBWSsk7gszZ7F9Yq50TrxkZBpYUYR30JSc",
6     "authDomain": "verk4-d99d2.firebaseio.com",
7     "databaseURL": "https://verk4-d99d2.firebaseio.com",
8     "projectId": "verk4-d99d2",
9     "storageBucket": "verk4-d99d2.appspot.com",
10    "messagingSenderId": "997403664419",
11    "appId": "1:997403664419:web:b05dfd0058f2d6eebd9196",
12    "measurementId": "G-D4FVDFQ1YV"
13 };
14
15 firebase = pyrebase.initialize_app(config)
16
17 auth = firebase.auth()
18
19
```

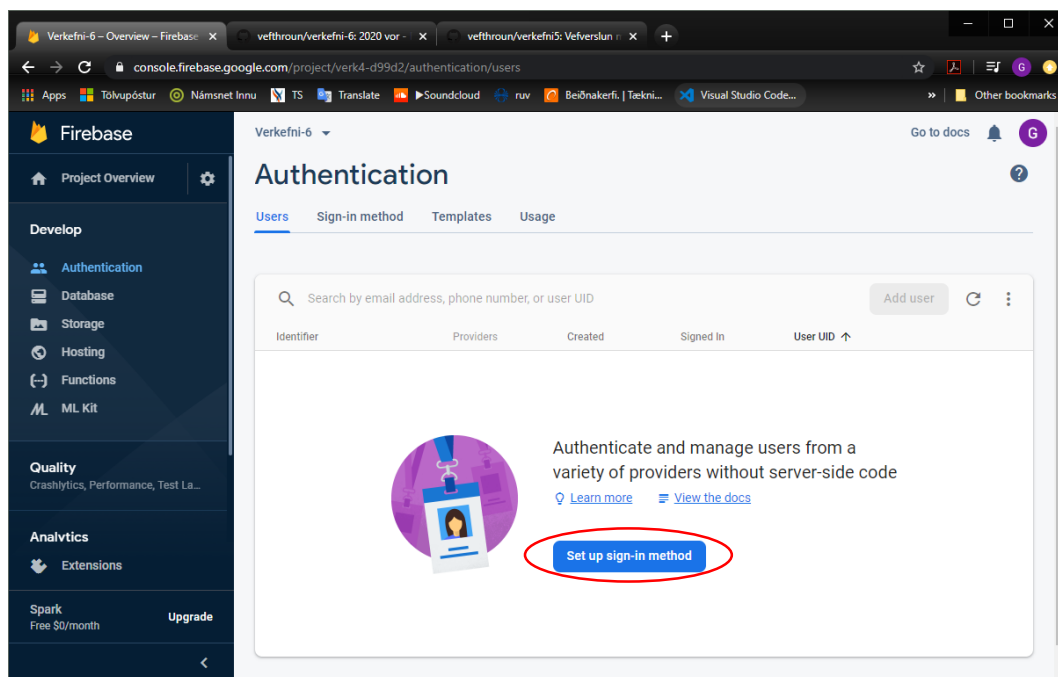
Bætið textanum við sem er í línu 15 og 17. Því næst:

```
email = input('Please enter your email\n')
password = input('Please enter your password\n')

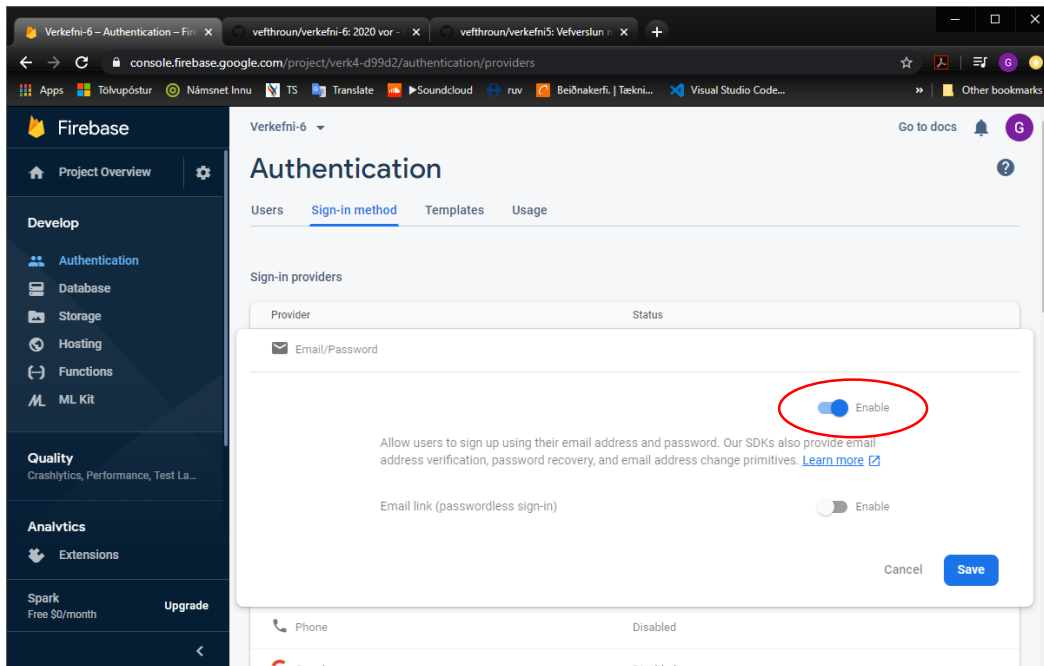
user = auth.create_user_with_email_and_password(email, password)

auth.get_account_info(user['idToken'])
```

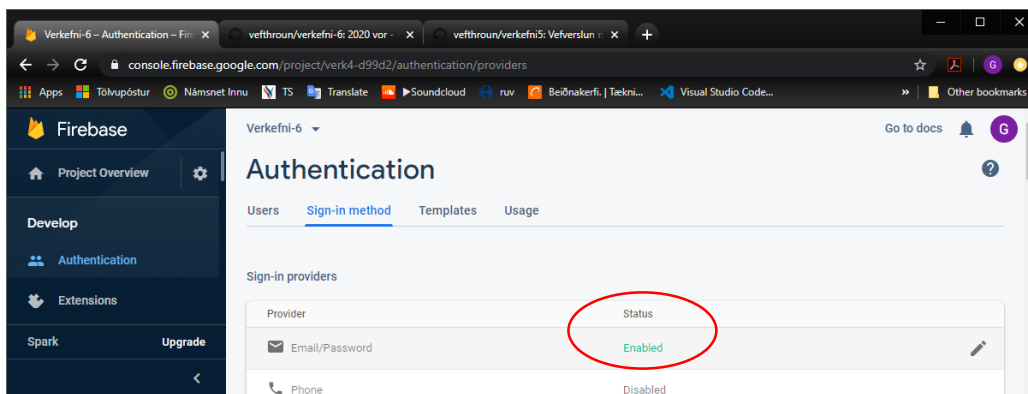
Firestore authentication



Veljið *Set up sign-in method*



Enable – Email/password – save



VSC keyrið (run) appið

```

File Edit Selection View Go Debug Terminal Help • app.py - VEF2VF - Visual Studio Code
app.py
verkefni6 > app.py > ...
14
15 firebase = pyrebase.initialize_app(config)
16
17 auth = firebase.auth()
18
19 email = input('Please enter your email\n')
20 password = input('Please enter your password\n')
21
22 user = auth.create_user_with_email_and_password(email, password)
23
24 auth.get_account_info(user['idToken'])
25
26 app = Flask(__name__)
27

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Python
(env)
gjjg@BT-S-637-02 MINGW64 ~/Desktop/VEF2VF
$ c:/Users/gjjg/Desktop/VEF2VF/env/Scripts/python.exe c:/Users/gjjg/Desktop/VEF2VF/verkefni6/app.py
Please enter your email
gjjg@tskoli.is
Please enter your password
Abc12345

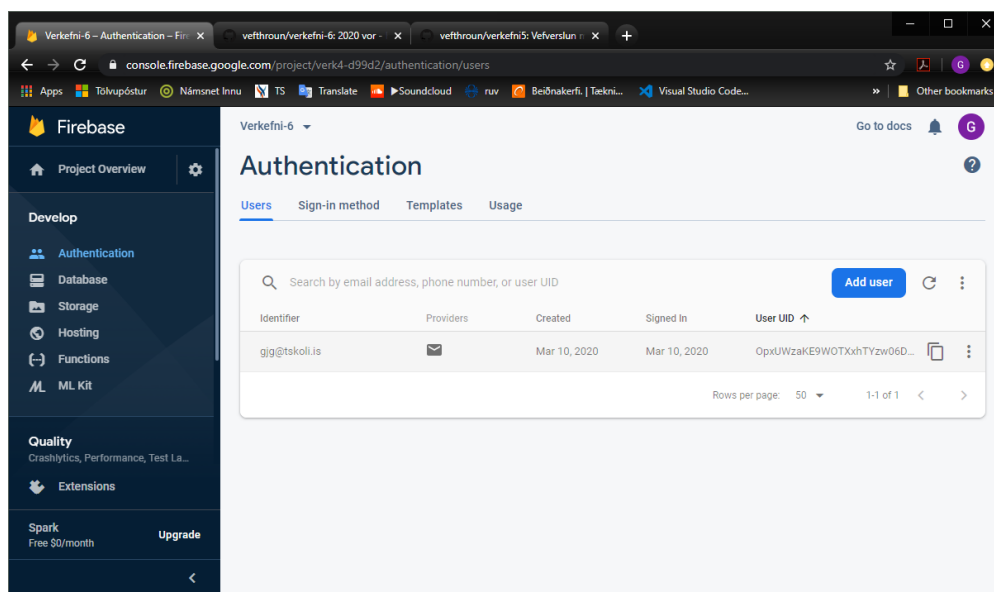
```

Skráið tölvupóstfang (enter) og lykilorð (enter)

```
File Edit Selection View Go Debug Terminal Help • app.py - VEF2VF - Visual Studio Code
verkefni6 > app.py > ...
14
15     firebase = pyrebase.initialize_app(config)
16

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Python
Please enter your password
Abc12345
b'\r\xee\xcb\x98\x83\xa25\x17'
* Serving Flask app "app" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Í Firebase/authentication/USERS

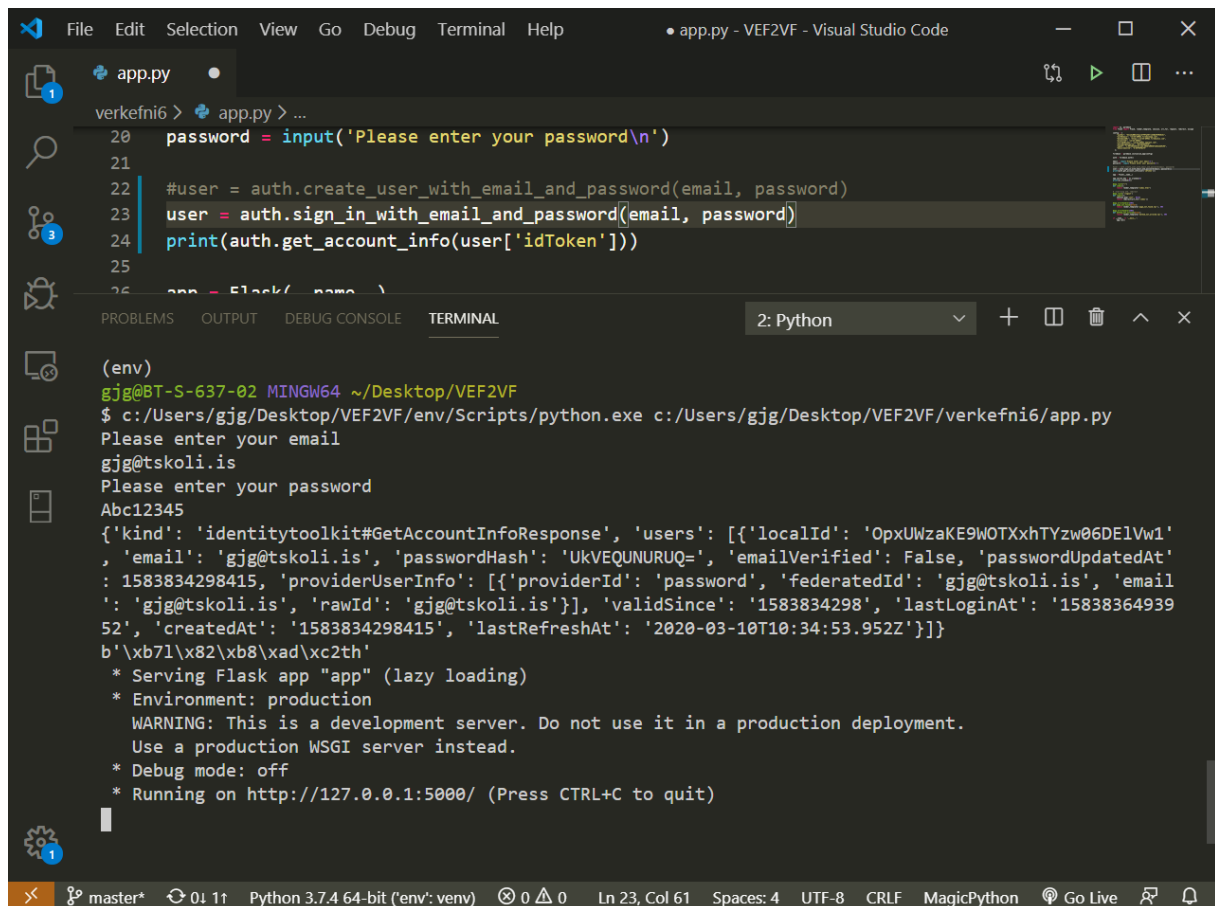


Notandi er skráður með lykiorði (#)

Innskráning - print(sjáum innskráinguna)

```
#user = auth.create_user_with_email_and_password(email, password)
user = auth.sign_in_with_email_and_password(email, password)
print(auth.get_account_info(user['idToken']))
```

enduræsum appið



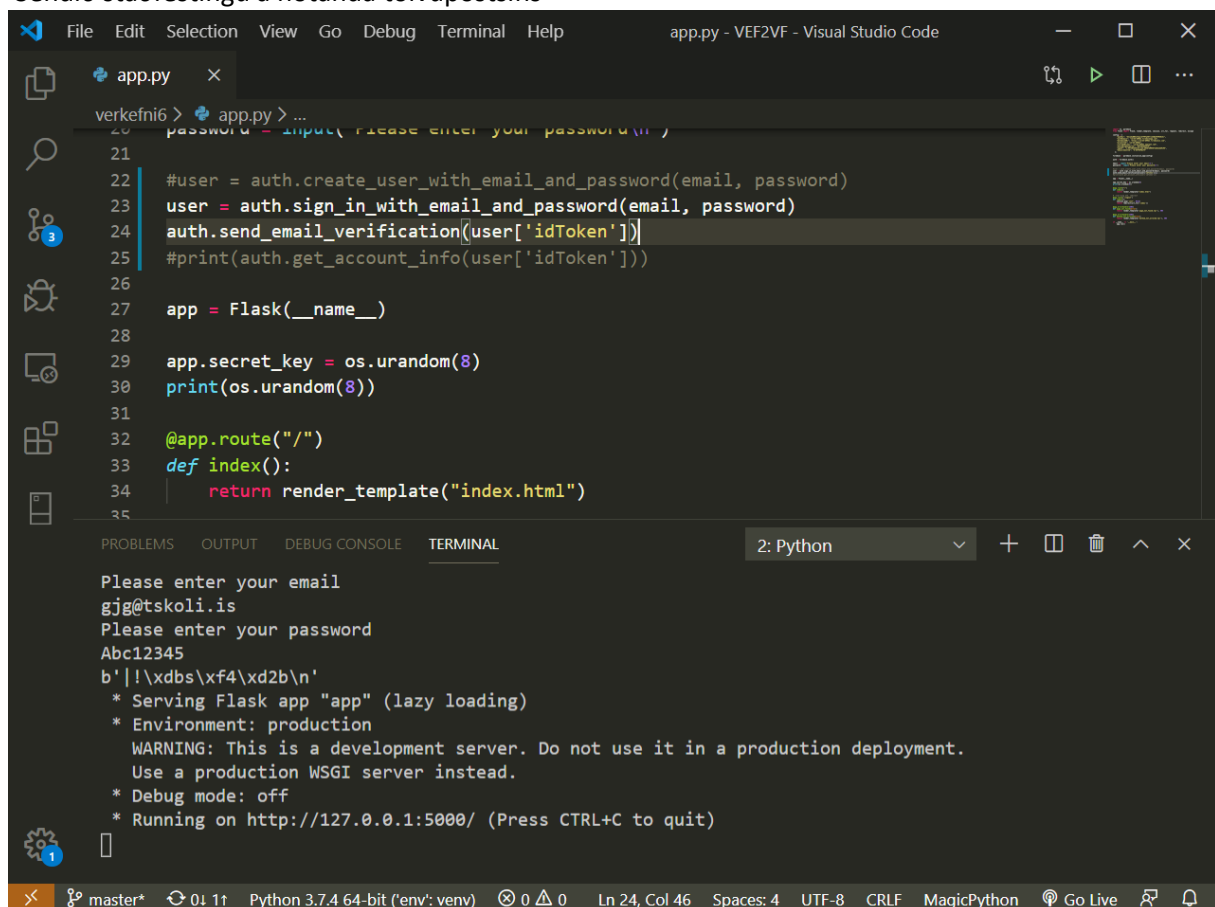
```
File Edit Selection View Go Debug Terminal Help • app.py - VEF2VF - Visual Studio Code

verkefni6 > app.py > ...
20 password = input('Please enter your password\n')
21
22 #user = auth.create_user_with_email_and_password(email, password)
23 user = auth.sign_in_with_email_and_password(email, password)
24 print(auth.get_account_info(user['idToken']))
25
26 app = Flask(__name__)

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Python

(env)
gjjg@BT-S-637-02 MINGW64 ~/Desktop/VEF2VF
$ c:/Users/gjjg/Desktop/VEF2VF/env/Scripts/python.exe c:/Users/gjjg/Desktop/VEF2VF/verkefni6/app.py
Please enter your email
gjjg@tskoli.is
Please enter your password
Abc12345
{'kind': 'identitytoolkit#GetAccountInfoResponse', 'users': [{'localId': 'OpxUWzaKE9WOTXxhTYzw06DElVw1',
'email': 'gjjg@tskoli.is', 'passwordHash': 'UkVEQUNURUQ=', 'emailVerified': False, 'passwordUpdatedAt':
: 1583834298415, 'providerUserInfo': [{'providerId': 'password', 'federatedId': 'gjjg@tskoli.is', 'email':
: 'gjjg@tskoli.is', 'rawId': 'gjjg@tskoli.is'}], 'validSince': '1583834298', 'lastLoginAt': '15838364939
52', 'createdAt': '1583834298415', 'lastRefreshAt': '2020-03-10T10:34:53.952Z'}]}
b'\xb7l\x82\xb8\xad\xc2h'
* Serving Flask app "app" (lazy loading)
* Environment: production
WARNING: This is a development server. Do not use it in a production deployment.
Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Sendið staðfestingu á notanda tölvupóstsins



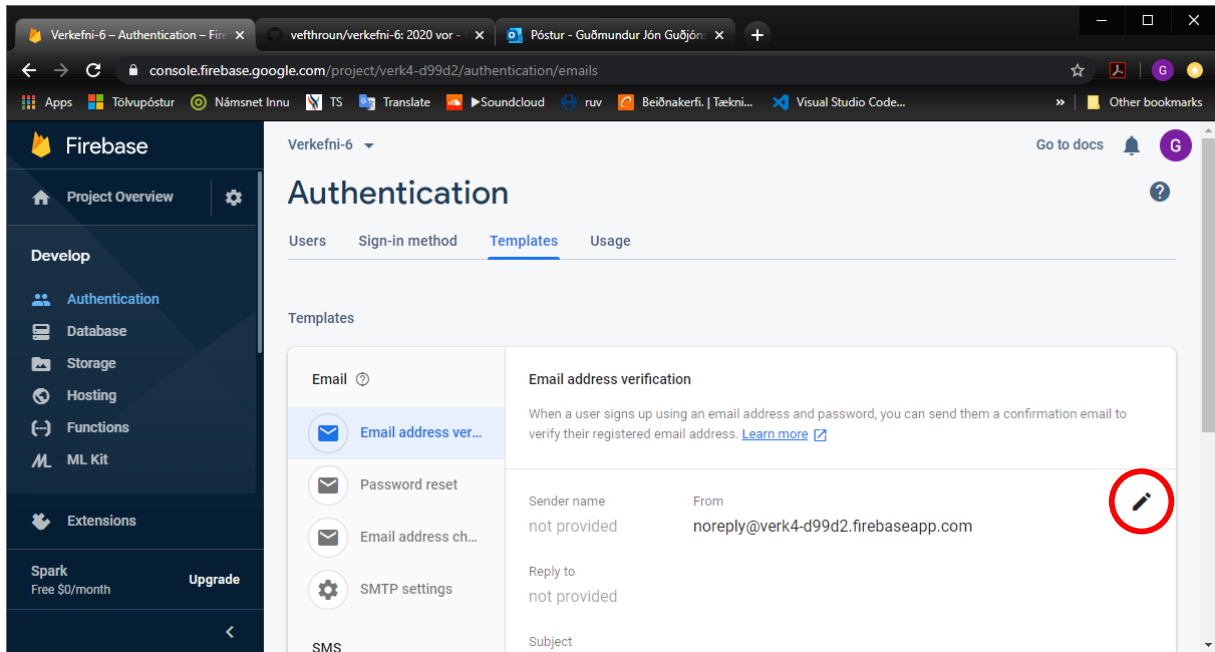
```
File Edit Selection View Go Debug Terminal Help app.py - VEF2VF - Visual Studio Code

verkefni6 > app.py > ...
20 password = input('Please enter your password\n')
21
22 #user = auth.create_user_with_email_and_password(email, password)
23 user = auth.sign_in_with_email_and_password(email, password)
24 auth.send_email_verification(user['idToken'])
25 #print(auth.get_account_info(user['idToken']))
26
27 app = Flask(__name__)
28
29 app.secret_key = os.urandom(8)
30 print(os.urandom(8))
31
32 @app.route("/")
33 def index():
34     return render_template("index.html")
35

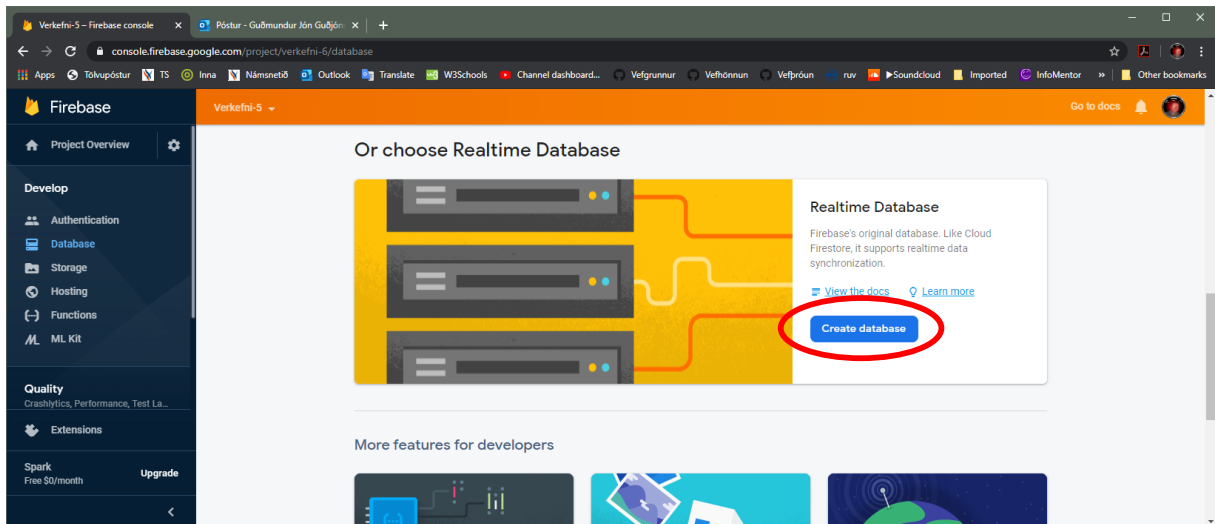
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Python

Please enter your email
gjjg@tskoli.is
Please enter your password
Abc12345
b'!\xdbs\xfa4\xd2b\n'
* Serving Flask app "app" (lazy loading)
* Environment: production
WARNING: This is a development server. Do not use it in a production deployment.
Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

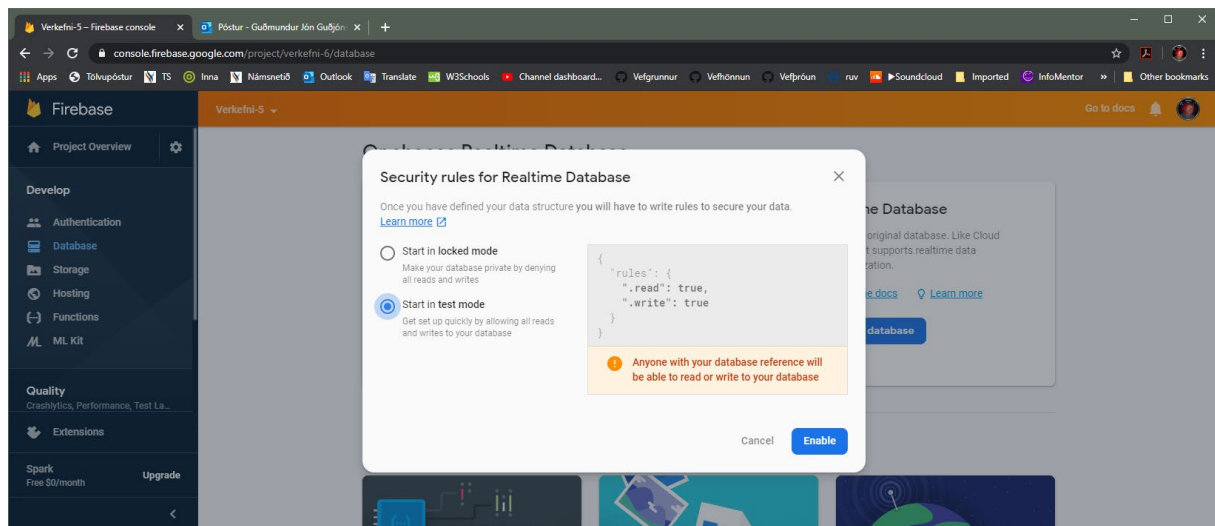
Í Firebase þarf að setja upp *reply template*



FireBase Realtime Database using Python and Flask
<https://www.youtube.com/watch?v=aojoWWMN1r0&t=51s>



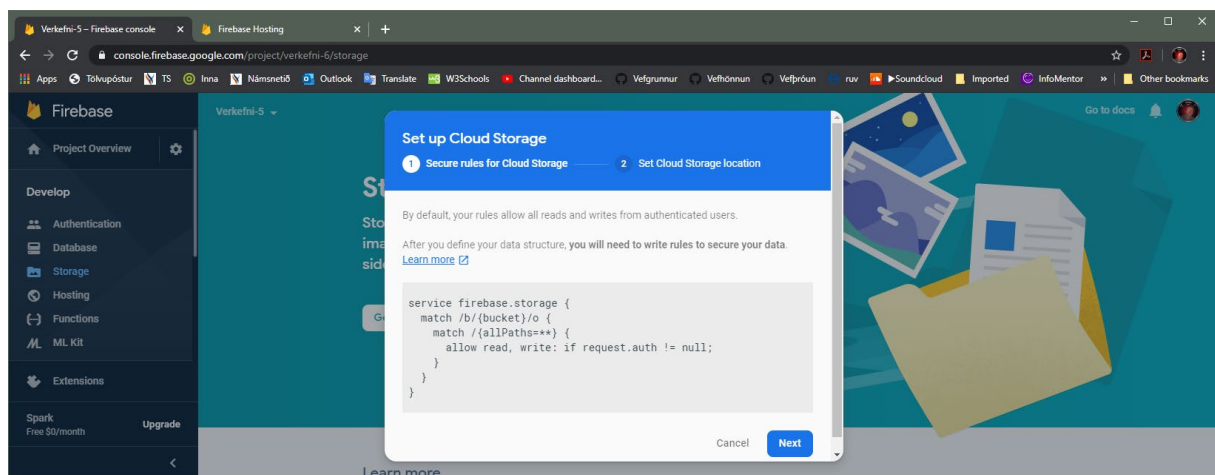
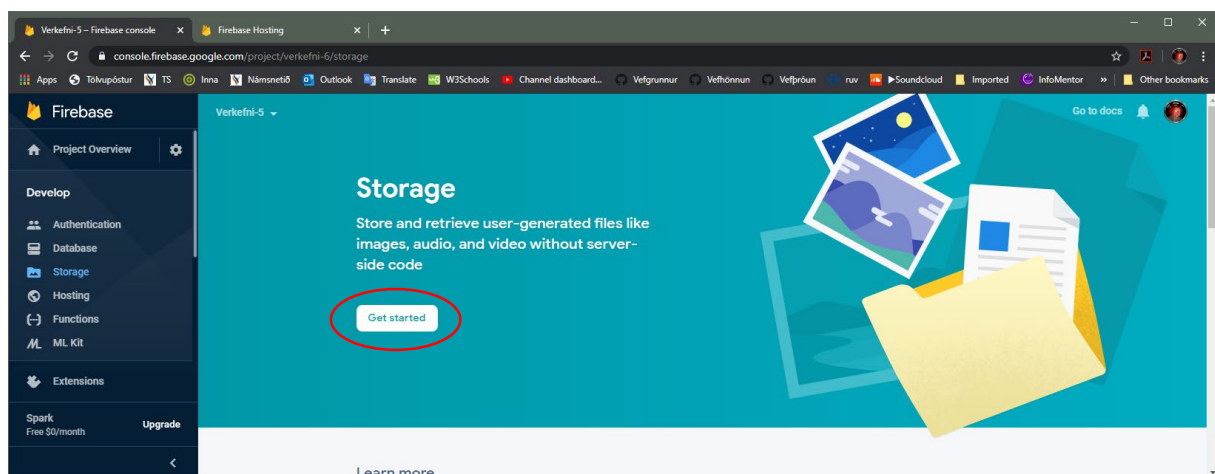
Start in Test mode

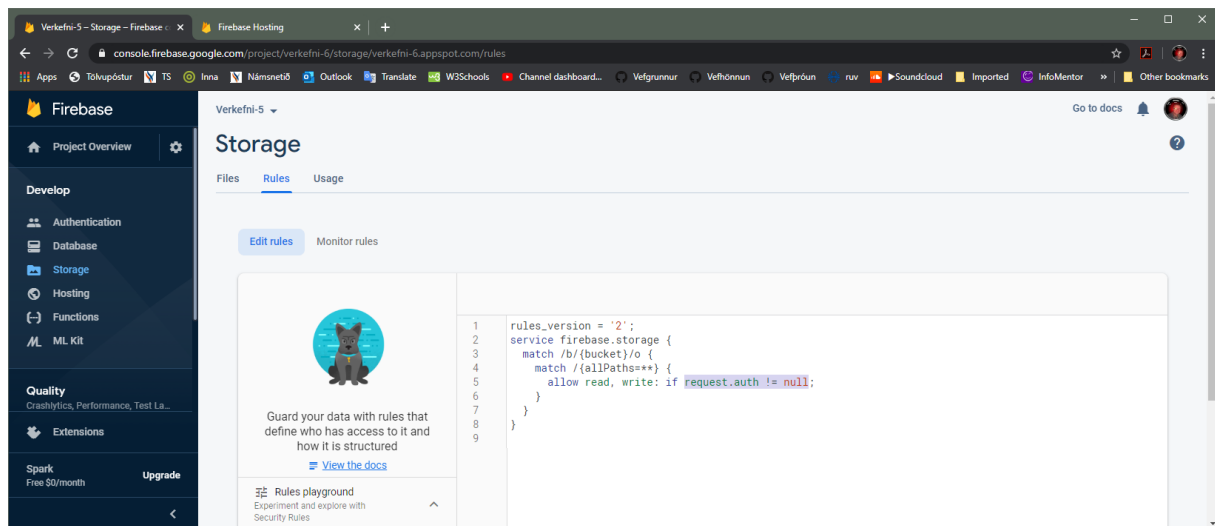


Í næsta verkefni tökum við fyrir

Firebase Storage

<https://www.youtube.com/watch?v=QxtIBQPIhjs&t=8s>





Breyta í True