# Python Firebase

## Authentication

<https://www.youtube.com/watch?v=8wa4AHGKUJM&list=PLhPDb5zFmGR2VfXiN2y-1V0qdRik7Cc0K>

1. Open firebase in browser
2. Authentication -> sign in methods -> email and password -> enable and add new user
3. Click project overview -> Add project to webapp
4. Create a new Django project
5. Open cmd
6. >django-admin startproject DjangoFirebase
7. >cd DjangoFirebase
8. >python manage.py migrate
9. >python manage.py startapp firebase
10. Create a new templates folder
11. In settinds.py -> add templates folder

TEMPLATES = [

    {

        'BACKEND': 'django.template.backends.django.DjangoTemplates',

        'DIRS': ['templates'],

        'APP\_DIRS': True,

        'OPTIONS': {

            'context\_processors': [

                'django.template.context\_processors.debug',

                'django.template.context\_processors.request',

                'django.contrib.auth.context\_processors.auth',

                'django.contrib.messages.context\_processors.messages',

            ],

        },

    },

]

1. >pip install pyrebase
2. >python manage.py runserver
3. Views.py

from django.shortcuts import render

import pyrebase

firebaseConfig = {

    'apiKey': "AIzaSyCyc2oGOUKwu6y-OS0hPjDxoo-d3Sq5R\_k",

    'authDomain': "fireapp-ff7ee.firebaseapp.com",

    'databaseURL': "https://fireapp-ff7ee.firebaseio.com",

    'projectId': "fireapp-ff7ee",

    'storageBucket': "fireapp-ff7ee.appspot.com",

    'messagingSenderId': "879327724100",

    'appId': "1:879327724100:web:3eb9d44c32f0d99cc0b211"

  }

firebase = pyrebase.initialize\_app(firebaseConfig)

auth = firebase.auth()

def signIn(request):

    return render(request, "signin.html", context = {})

def postsign(request):

    email = request.POST['email']

    password = request.POST['password']

    user  = auth.sign\_in\_with\_email\_and\_password(email, password)

    return render(request, "welcome.html", context = {"email" : email})

1. Urls.py

from django.contrib import admin

from django.urls import path

from firebase import views

urlpatterns = [

    path('admin/', admin.site.urls),

    path('signin/', views.signIn, name="signin"),

    path('postsign/', views.postsign, name="postsign"),

]

1. Templates/Signin.html

<h1>Welcome to Firebase WebApp</h1>

<form action="/postsign/" method="POST">

    {% csrf\_token %}

    Email:<input type="email"  name="email" required> <br>

    Password: <input type="password"  name="password" required> <br>

    <input type="submit" name="submit" value="SignIn" >

</form>

1. Templates/welcome.html

<h1>Welcome to fireapp {{email}}</h1>

## Session

## Save data to firebasedatabase

1. Create new templates/signup.html file

<h1>Welcome to Firebase WebApp</h1>

<form action="/postsignup/" method="POST">

    {% csrf\_token %}

    Name:<input type="text"  name="name" required> <br>

    Email:<input type="email"  name="email" required> <br>

    Password: <input type="password"  name="password" required> <br>

    <input type="submit" name="submit" value="SignIn" >

</form>

1. Templates/Signin.html

<h1>Welcome to Firebase WebApp</h1>

<form action="/postsign/" method="POST">

    {% csrf\_token %}

    Email:<input type="email"  name="email" required> <br>

    Password: <input type="password"  name="password" required> <br>

    <input type="submit" name="submit" value="SignIn" >

    <button type="button" name="signup" value="SignUp" onclick="location.href='{% url 'signup' %}'" >SignUp</button>

</form>

1. Urls.py

urlpatterns = [

    path('admin/', admin.site.urls),

    path('signin/', views.signIn, name="signin"),

    path('postsign/', views.postsign, name="postsign"),

    path('logout/', views.logout, name="logout"),

    path('signup/', views.signUp, name="signup"),

]

1. Views.py

from django.shortcuts import render

from django.contrib import auth

import pyrebase

firebaseConfig = {

    'apiKey': "AIzaSyCyc2oGOUKwu6y-OS0hPjDxoo-d3Sq5R\_k",

    'authDomain': "fireapp-ff7ee.firebaseapp.com",

    'databaseURL': "https://fireapp-ff7ee.firebaseio.com",

    'projectId': "fireapp-ff7ee",

    'storageBucket': "fireapp-ff7ee.appspot.com",

    'messagingSenderId': "879327724100",

    'appId': "1:879327724100:web:3eb9d44c32f0d99cc0b211"

  }

firebase = pyrebase.initialize\_app(firebaseConfig)

auth\_f = firebase.auth()

database = firebase.database()

def signIn(request):

    return render(request, "signin.html", context = {})

def postsign(request):

    email = request.POST['email']

    password = request.POST['password']

    message = email

    try:

        user  = auth\_f.sign\_in\_with\_email\_and\_password(email, password)

    except :

        message = "Invalid credentials"

    print(user)

    session\_id = user['idToken']

    request.session['uid'] = str(session\_id)

    return render(request, "welcome.html", context = {"email" : message})

def logout(request):

    auth.logout(request)

    return render(request, "signin.html", context = {})

def signUp(request):

    return render(request, "signup.html", context = {})

def postsignup(request):

    name = request.POST['name']

    email = request.POST['email']

    password = request.POST['password']

    user = auth\_f.create\_user\_with\_email\_and\_password(email, password)

    uid = user['localId']

    data = {

        "name" : name,

        "status" : "1"

    }

    database.child("users").child(uid).child("details").set(data)

    return render(request, "signin.html", context = {})

1. In browser – enable read write permission to database

