REAL-TIME IMAGE SHARING

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CLIENT ASKS FOR POC...

- Users should be able to easily sign-in (which is required)
- Users should be able to upload images from their camera
- Other users should see these images immediately
- Users should be able to manage their own images
- Users should be able to like images of others

DEADLINE IS SET FOR YESTERDAY

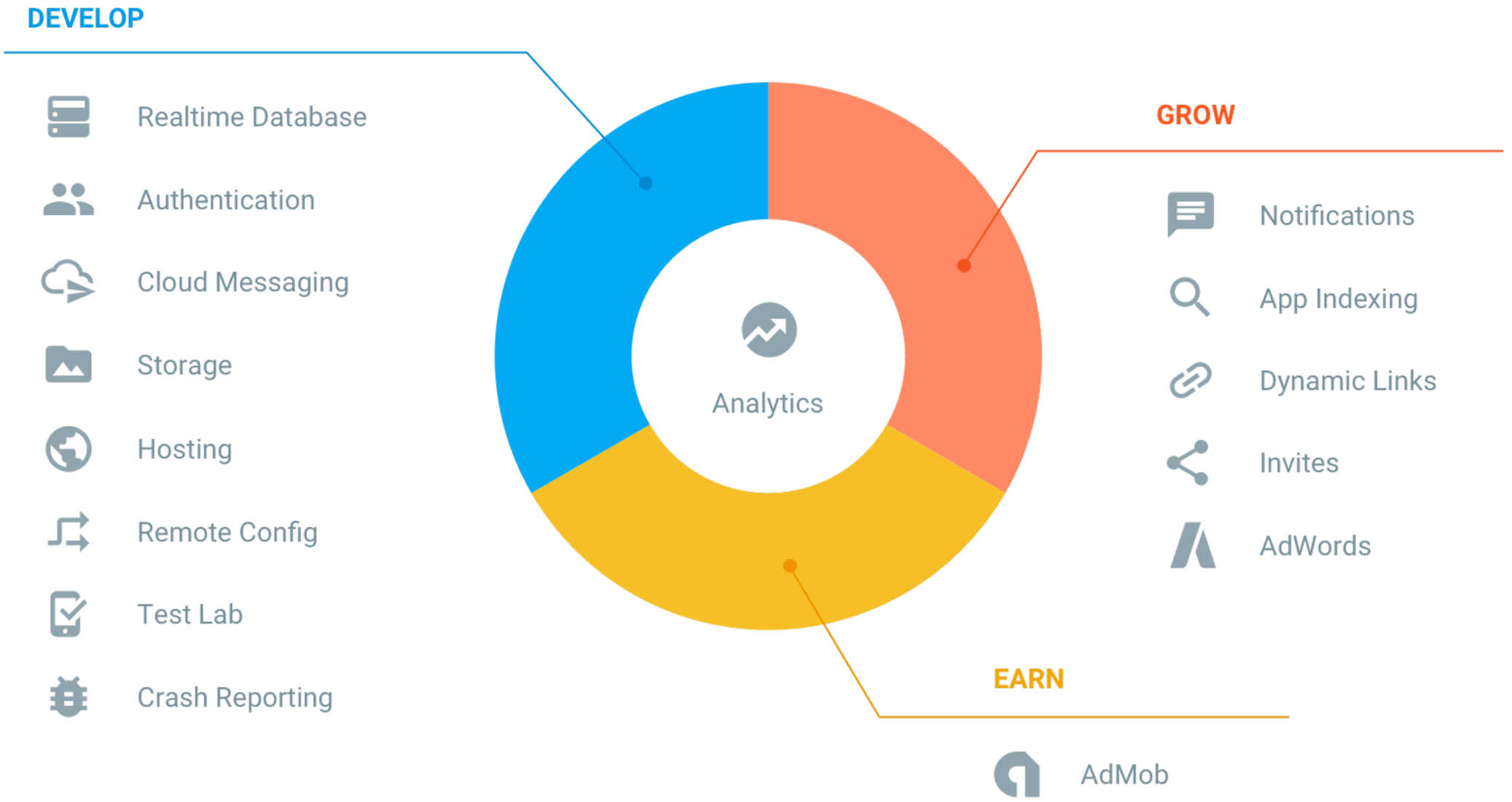
SO WHAT DO WE NEED TO DO

- Some server to handle our uploads and other api requests
- Scalable storage system for storing the images
- A mechanism to notify all users at once about new images, and fetch them
- Build the Authentication and Listing views to Android client

BUT ALL THAT WILL TAKE AT LEAST DAYS

WHAT IF I TOLD YOU,

NOT NECESSARILY



https://firebase.google.com

LETS JUST USE FOLLOWING

- Firebase Auth
- Firebase Storage
- Firebase Realtime Database
- FirebaseUI (https://github.com/firebase/firebaseui)

NOW WE HAVE SOLVED

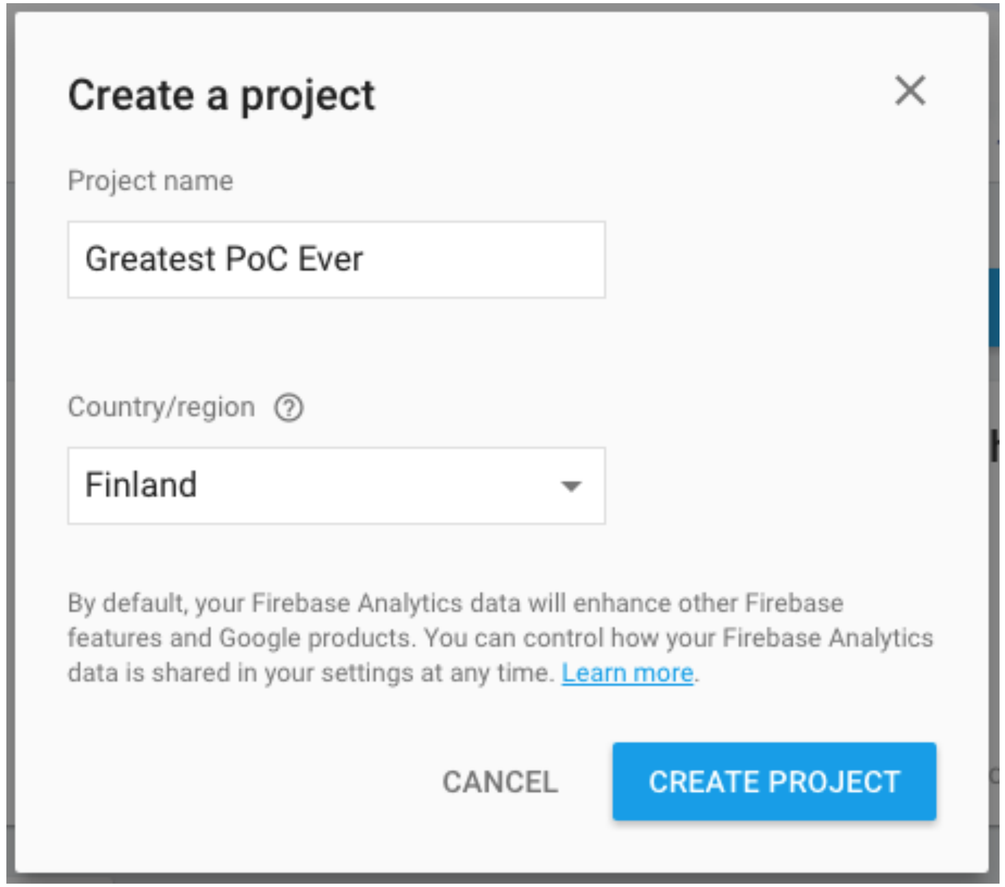
- ~~Some server to handle our uploads and other api requests~~
- ~~Scalable storage system for storing the images~~
- ~~A mechanism to notify all users at once about new images, and fetch them~~
- ~~For UI, we will use ready components as much as possible~~

LETS START

BUILDING

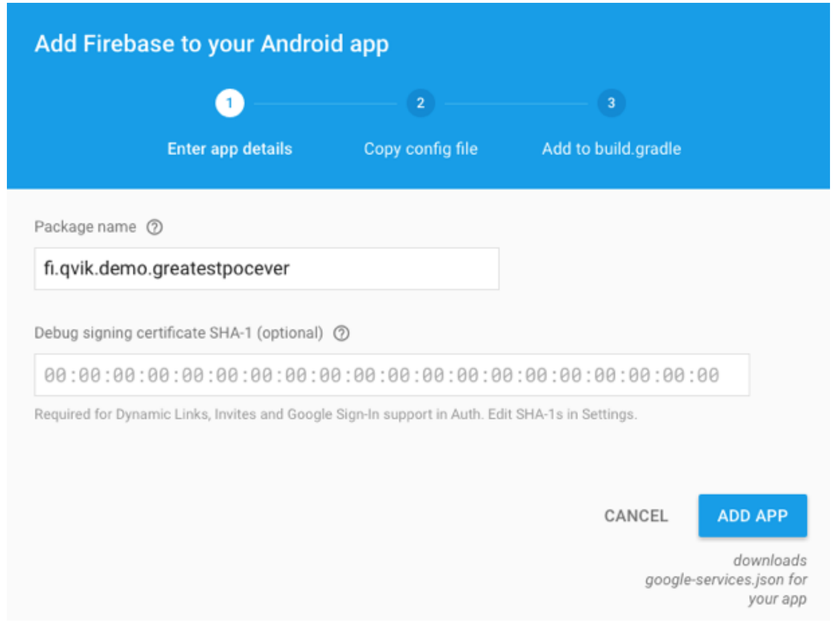
1. LETS ADD FIREBASE TO OUR APP

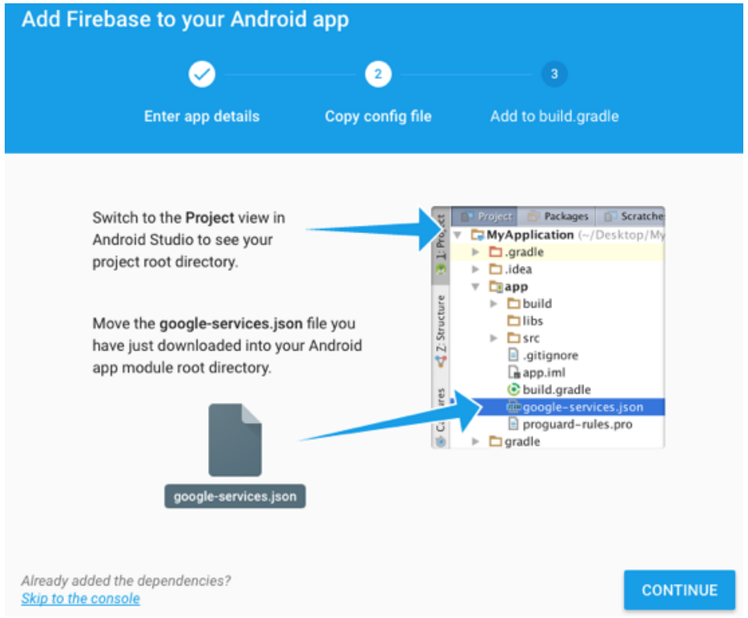
We head to https://console.firebase.google.com/ and create new project

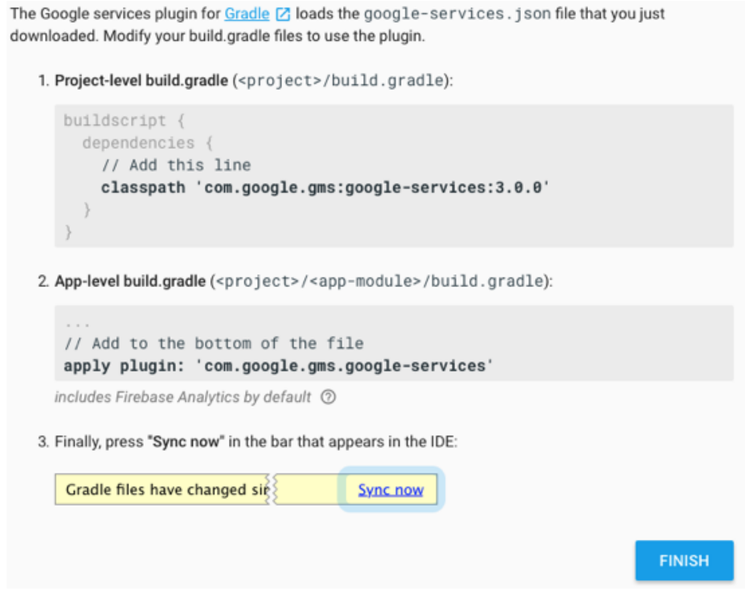


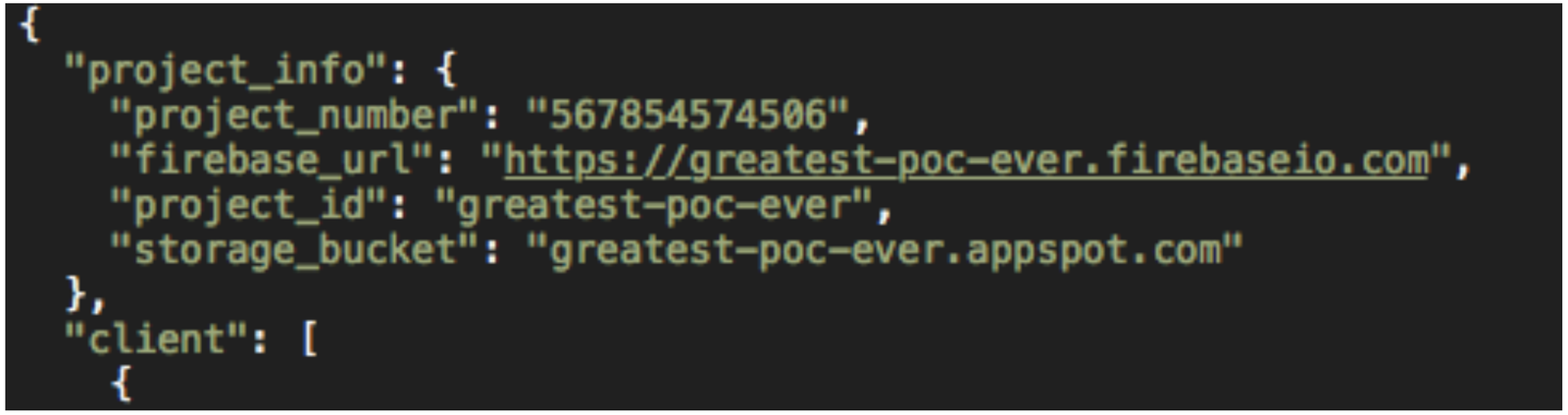
1. LETS ADD FIREBASE TO OUR APP

Next we create and download Firebase configuration for our app



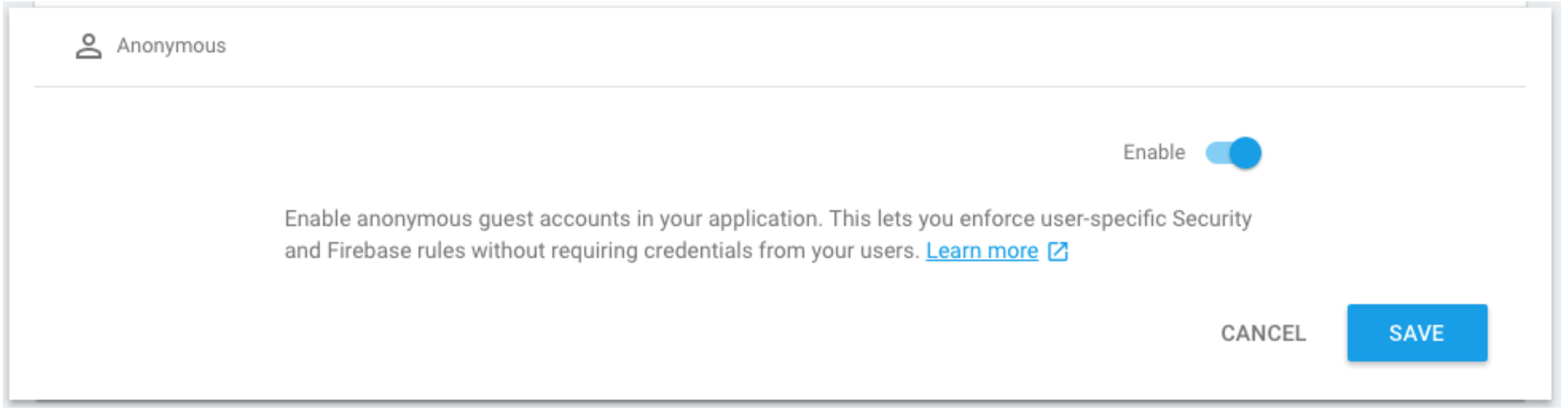






2. LETS ENABLE AUTHENTICATION

We head to Authentication / Sign-In method config and enable Anonymous auth



3. LETS BUILD THE BASIC UI

(Create some amazing UI by writing layout XML)

4. FETCH THE ADDED IMAGES WITH LIVE CHANGES

Here is just one simple way of listening for changes in our images collection

```
private FirebaseDatabase mDatabase;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);

    // Initialize Firebase Database
    mDatabase = FirebaseDatabase.getInstance();
    // Get refererence to our images database collection
    DatabaseReference imagesRef = mDatabase.getReference("images");
    // Listen for
    imagesRef.limitToFirst(10).addChildEventListener(new ChildEventListener() {
        @Override
        public void onChildAdded(DataSnapshot dataSnapshot, String previousChildName) {
            // New image has been was added...
        }

        @Override
        public void onChildRemoved(DataSnapshot dataSnapshot) {}

        @Override
        public void onChildChanged(DataSnapshot dataSnapshot, String previousChildName) {}

        @Override
        public void onChildMoved(DataSnapshot dataSnapshot, String previousChildName) {}

        @Override
        public void onCancelled(DatabaseError error) {}
    });
}
```

5. UPLOAD IMAGE TO STORAGE

Here is just one simple way of uploading a file to Firebase storage

```
private void upload(final Uri fileUri) {
    // Initialize Firebase Storage
    StorageReference mStorageRef = FirebaseStorage.getInstance().getReference();
    // Get a reference to store file at photos/<FILENAME>.jpg
    final StorageReference photosRef = mStorageRef.child("photos")
            .child(fileUri.getLastPathSegment());
    // Upload file to Firebase Storage
    photosRef.putFile(fileUri)
            .addOnSuccessListener(this, new OnSuccessListener<UploadTask.TaskSnapshot>() {
                @Override
                public void onSuccess(UploadTask.TaskSnapshot taskSnapshot) {
                    // Upload succeeded, update details to our images collection...
                }
            });
}
```

AND WE ARE DONE

WELL, ALMOST

LIVE DEMO

SCAN THE QR CODE TO INSTALL

HTTPS://GITHUB.COM/JERRYJJ/FIREBASE-STORAGE-DEMO-ANDROID

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