

Mobile technology solution

First practical work: Run an Augmented Reality app in Kotlin and change the 3D model in it.

To do list to complete the project:

- Download the arcore-android-sdk repository from github to get basic AR projects
- Run a sample projet like hello_ar_android and try to place some object on a plan
- Change the model of the object and place it again on a plan

Progress report:

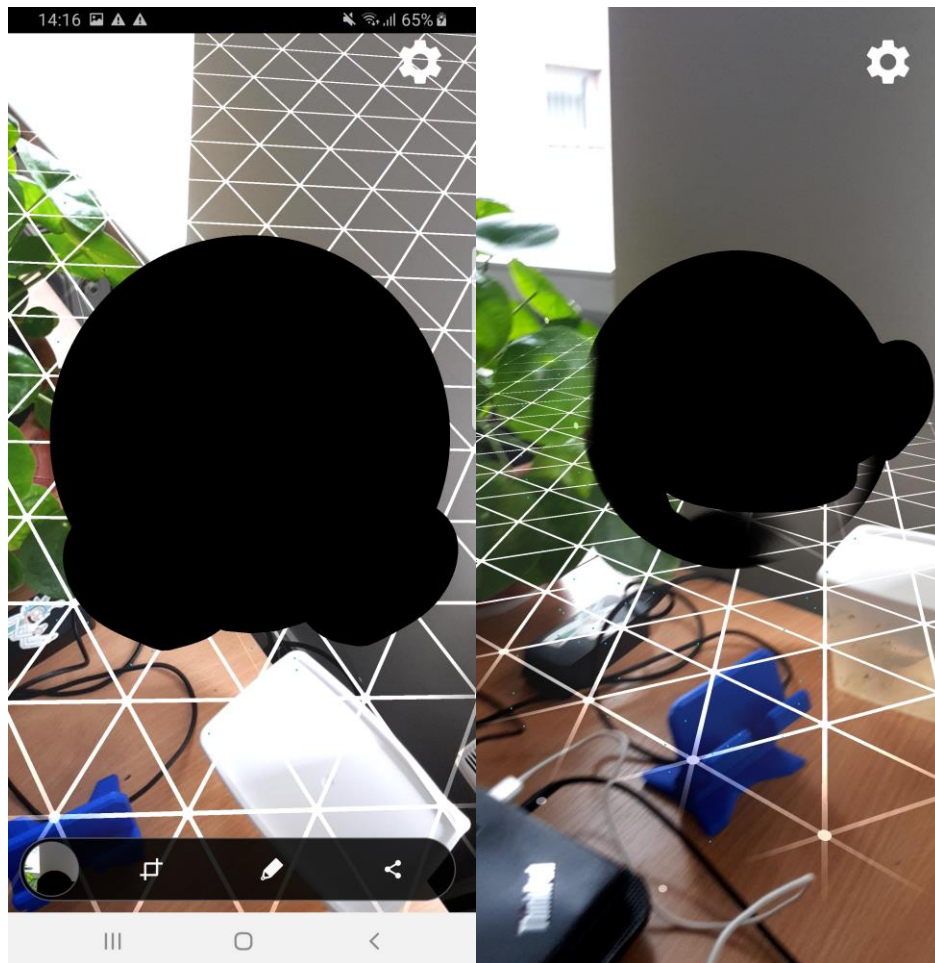
- Clone the repository <https://github.com/google-ar/arcore-android-sdk.git> from github on your computer.
- Open android studio and open hello_ar_android in the sample folder.
- Run the project on a phone and try to place a 3D model on a plan like a table or the floor.
- Download from a website like Sketchfab a 3d model and open it in blender to reduce the size.
- Open the file java > com.google.ar.core.examples > kotlin > helloar > HelloArRender.kt
- Change line 231 of the file by your new 3d model file name (make sure to have a file name with a .obj at the end

```
virtualObjectMesh = Mesh.createFromAsset(render, assetFileName: "models/Emoji.obj")
```

- Change the texture of the object by enter new file with .png at the end.

```
val virtualObjectPbrTexture =  
    Texture.createFromAsset(  
        render,  
        assetFileName: "models/pawn_roughness_metallic_ao.png",  
        Texture.WrapMode.CLAMP_TO_EDGE,  
        Texture.ColorFormat.LINEAR  
    )
```

- Relaunch the app and place an object on a plan, That's it you succeeded!



Link of my repository : https://github.com/AudouxH/second_practical_project