

1-S AcroYoga

Barbara De Groot
Ismael Frei

SkylSync

Your AcroYoga buddy

Smartphone



Your own skills catalogue



Pair a skill with your
acroYoga partner



Log your trainings
Monitor your bpm



Firebase database and
storage

Smartwatch



Take pictures & videos
Frame checking

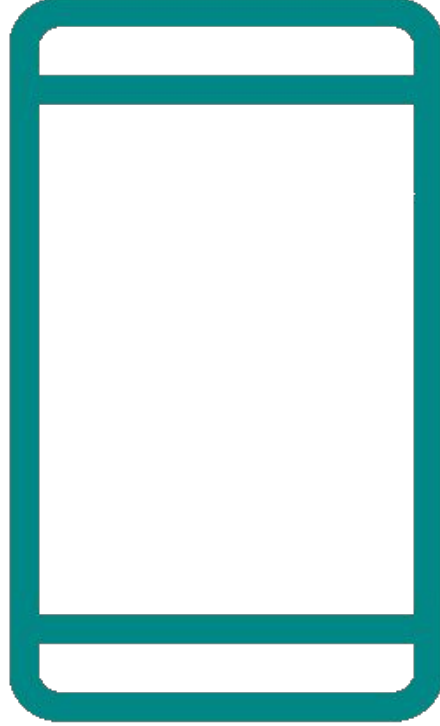


Time your trainings

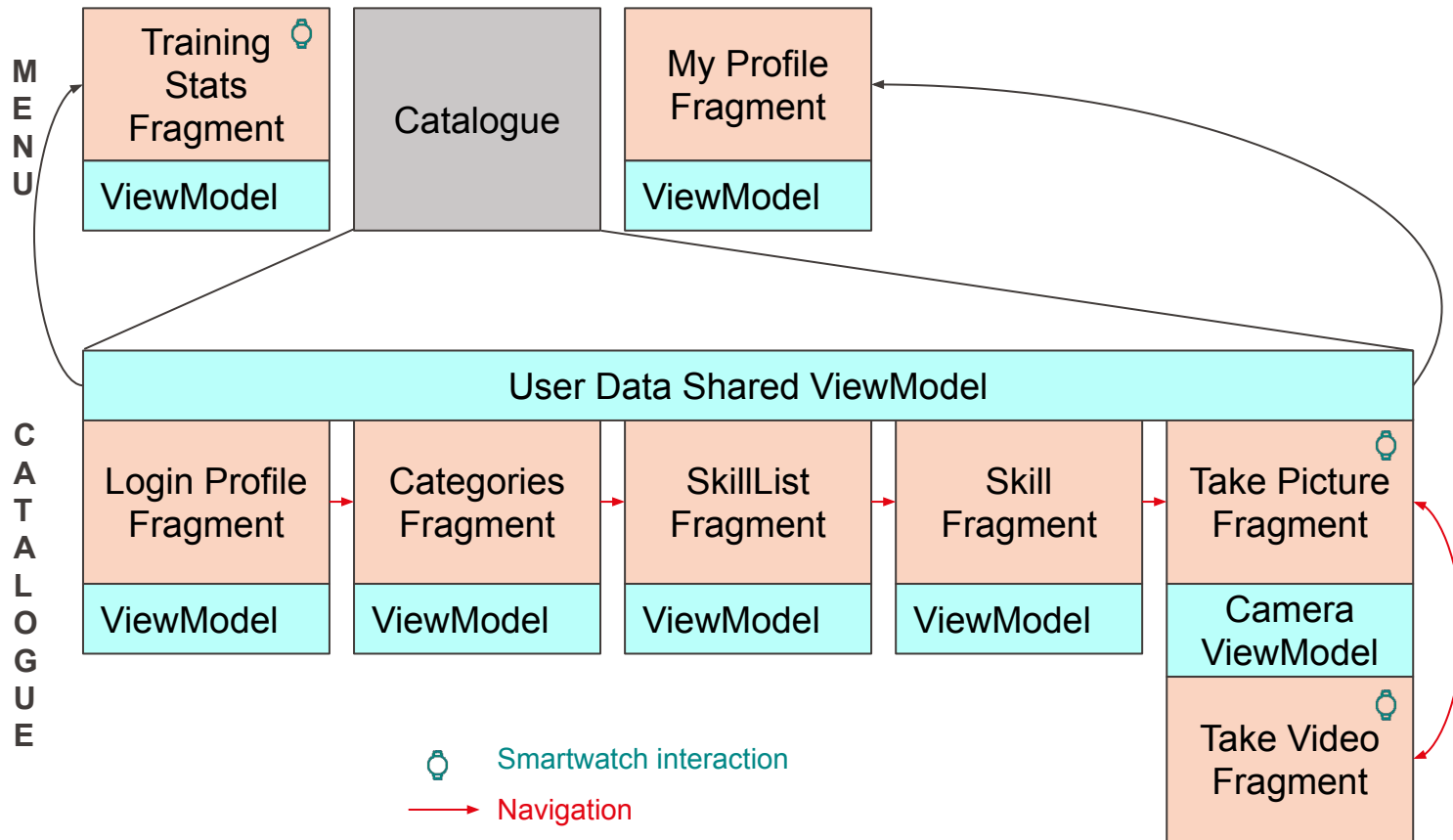
SkyllSync

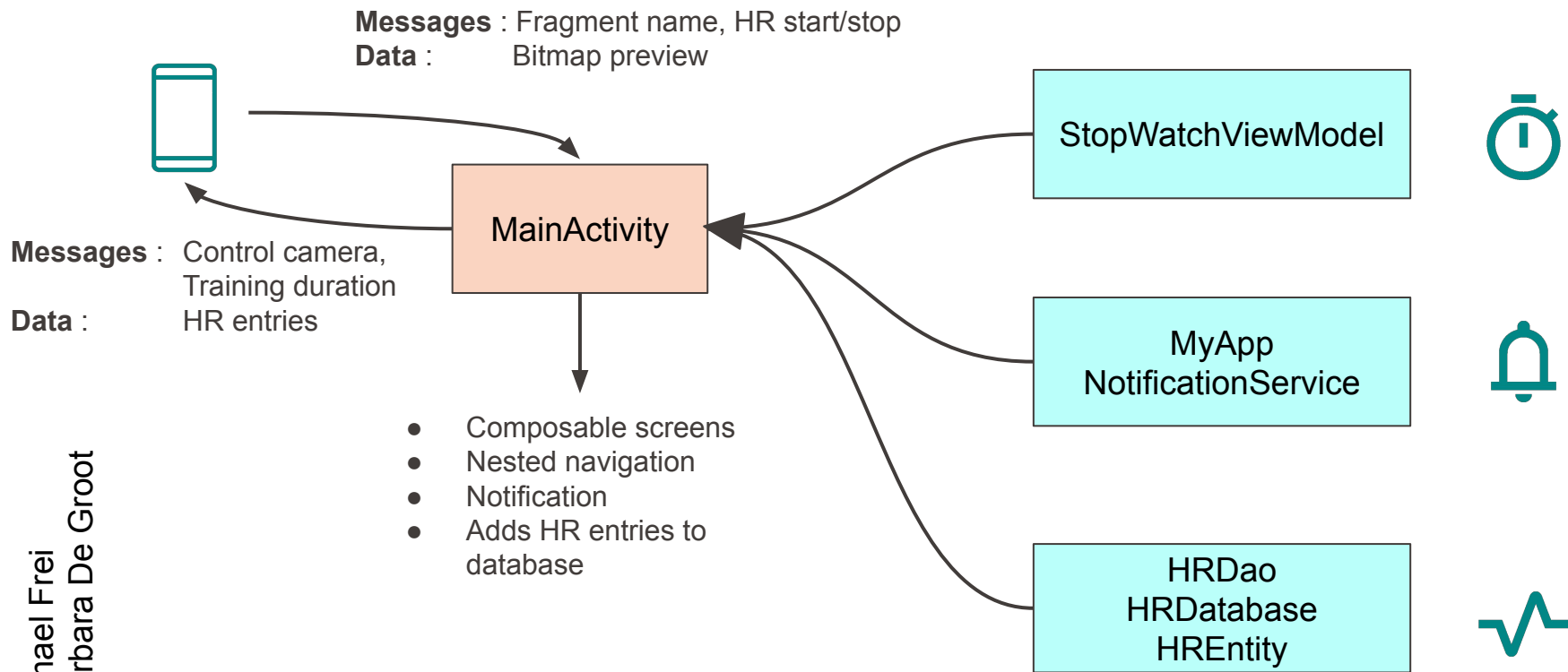
Showcase

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Android Architecture - Mobile





Database

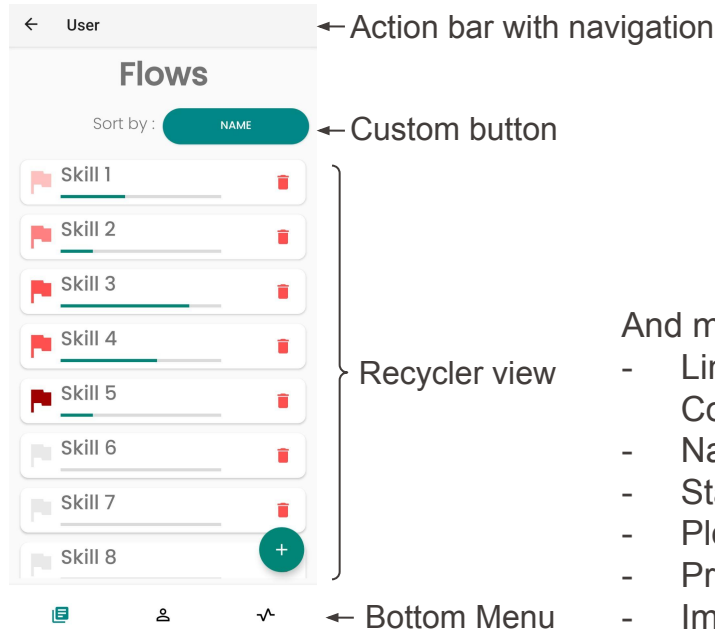
- Profiles:
 - username/password/profilePictureURL
 - Notifications:
 - push key: "Notification String"
 - Trainings:
 - Time stamp: Interval [ms]
 - Categories:
 - Category "A"
 - Skills:
 - Skill "A":
 - progression: Int
 - priority: Int
 - pairUpStatus: Int
 - pairUpName: "String"
 - Instagram Link: "String"
 - images:
 - push key: "String"
 - videos:
 - push key: "String"

Storage

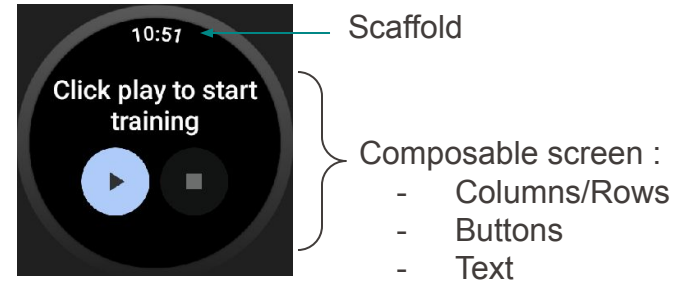
- ProfileImages
 - username.jpg
- images
 - username
 - category
 - skill
 - image A
 - image B
- videos
 - username
 - category
 - skill
 - video A
 - video B

Goal : User friendly design with a modern look

Smartphone



Smartwatch



And more :

- Linear, Relative, Constraint Layout
- NavDrawer Menu
- Standard buttons
- Plots
- Progress bars
- Images, Text, EditTexts...

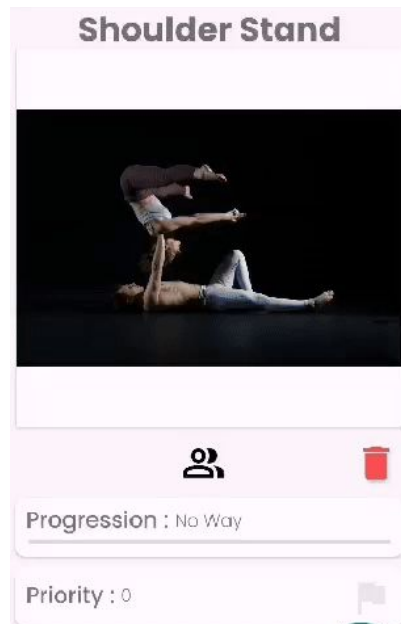
- Custom function for deleting folders on Firebase Storage



Ismael Frei

```
fun deleteStorageFolderContents(folderRef: StorageReference){  
    folderRef.listAll().addOnSuccessListener { listResult ->  
        // Delete each file in the folder  
        listResult.items.forEach { item ->  
            item.delete()  
        }  
  
        // Recursively delete files in each subfolder  
        listResult.prefixes.forEach { subfolder ->  
            deleteStorageFolderContents(subfolder)  
        }  
    }  
}
```

- Media recycler view



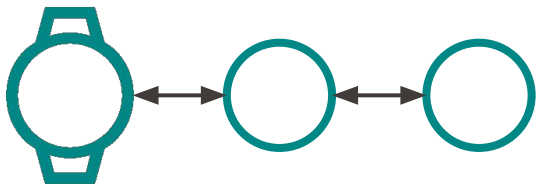
Challenges

- Controlling camera with Smartwatch



~~Intent~~
↓
CameraController / CameraProvider

- Smartwatch navigation between screens



~~Standard NavController~~
↓
Nested Navigation with compose

- #1 Taken picture or video not uploaded to partner
 - fix: SkillViewModel instantiated at Activity level.
- #2 User couldn't update data when in Skill (important if partnered)
 - fix: added skipRefreshLayout in SkillFragment for update
- #3 "Error downloading image" toast when registering
 - fix: profile picture is only downloaded when inside myProfileFragment

Thank you for your attention !

Questions ?



Minimum requirements:

- Cloud user management:
 - Sign in, sign out of different user profile
 - Upon first opening of the app, creation of a user profile
- Database:
 - Built in categories (Flows, Poses, Whips, Pops..)
 - User can add new categories on top of the built-in categories
 - Inside the different categories user can create different skills with progress tracking
 - User can upload videos and/or photos to skills
 - The database is stored on cloud (except media files depending on storage space)
- User network:
 - Different user can pair up to track their progress together
- Smartwatch:
 - Remote control for smartphone camera to take pictures and videos
 - Picture feedback for frame checking
 - Partner request notification
 - Acroyoga training time tracker
 - Vibration alert for drink/stretch notification during/after training
 - Using the heartbeat sensor to track effort during training session

Optional features:

- API:
 - Geolocation using google maps API to save media files location
 - Instagram API to link posts or reels to skills

Add-Ons:

- sort skills by name, priority or progression
- every element you add can also be deleted
- change profile picture
- take pictures/videos from inside app (no intent)
- track heart rate on the phone using smartwatch
- training session history is shown on the phone
- Pair Up notifications on phone and smartwatch
- Drink/Stretch notifications on smartwatch