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GetFit

Description

GetFit will help users to remain fit. The app can be used at home and do not require any equipment. This app will feature a daily motivational video which will keep its users motivated for workout. If user likes the video they can bookmark it and watch it later. This app will be solely written in the **Java Programming Language**.

Intended User

Intended for everyone who want to get fit or remain fit.

Features

Features for this app:
- Authenticates user using firebase either via email, google or facebook
- Shows daily motivational video to the users
- Motivational video will be played using Youtube API within the app.
- Bookmarks the motivational videos as per user request
- Saves the fitness instructions locally using Room which can be used offline
- Saves the user workout information to Firebase database
- Shows information report of user workout fetched from Firebase database
- Shows the timer and elapsed time in a workout
- App will keep all the strings in strings.xml file to allow RTL switching.
- App will support DDA/Accessibility

User Interface Mocks

These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Google Drawings, www.ninjamock.com, Paper by 53, Photoshop or Balsamiq.

Screen 1 : Login Screen

This login screen will let your login with their email id password or directly via google or

facebook account. It will help user tack their workout details.

Screen 2 : Workout Categories
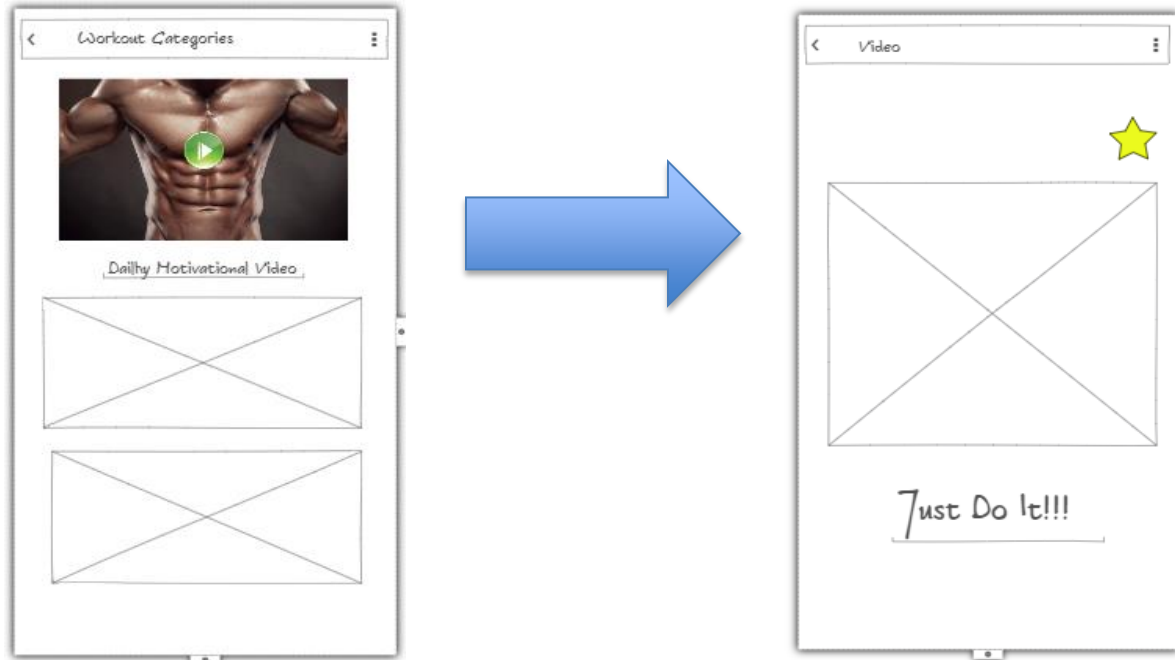

User will see this once they are logged in. It will show a daily motivational video at the top.

Below that it will show the CardView list of categories of workouts (e.g Abs, Chest, Legs).
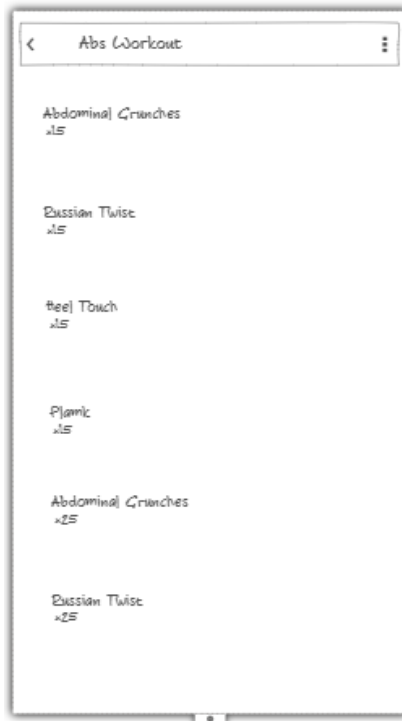
Clicking on motivational video will play the video within app using Youtube API and allow user to

bookmark the video. Clicking on workout category will take user to workout list (Refer Screen4).

Screen 3 : Workout Menu
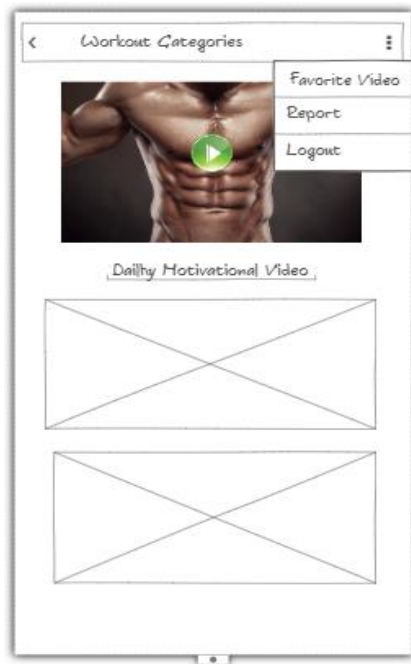
Workout screen has 3 menu options – Favorite videos, Report and Logout

Screen 4 : Workout List

This screen will show list of workouts in a selected workout category. E.g List of Abs workout Plank, Heel touch etc. It will also show the number of repetitions to be carried out.

Screen 5 : Workout Start/Stop

User can start the workout. Timer will run to log the elapsed time in workout. Once workout is finished they can mark it as done. Workout will be logged in Firebase Realtime database once it is finished. User can navigate to next/pervious workout from this screen.

Screen 6 : Favorite Videos
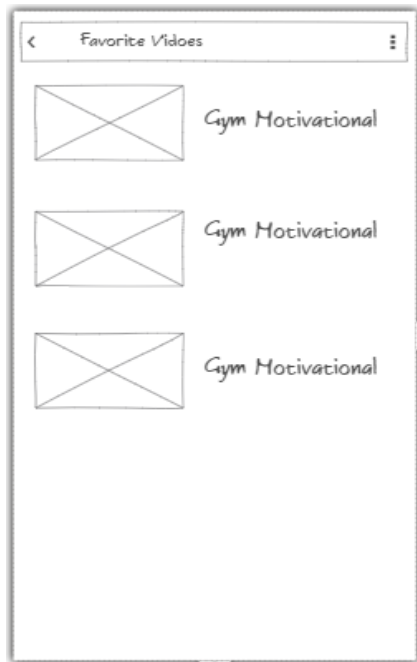
User can save daily motivational videos and can see them in this Menu -> Favorite Videos section. The Video information will be stored locally using Room database. Video will be played within app using Youtube API.

Screen 7 : Workout Report

	Report	⋮

Chest
1 Aug, 2018
15:30

Abs
2 Aug, 2018
08:35
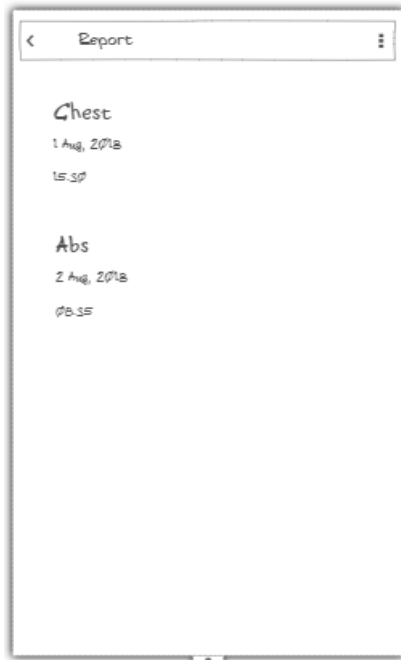
User can access their report in Menu -> Workout Report. This will show user how much time they have spent in a workout category and the date.

Screen 8 : Widget

Forgot Todays Workout?

Report

Heel Touch   04:30

Crunches   05:16

Widget (3x2) will be provided by the app which will inform user that they have not done todays workout. If workout is done then it will show the report of today.

Key Considerations

How will your app handle data persistence?

App will use Firebase real-time database to save the details of user workout. App will use Room database to store the workout details locally once it is received from mock server.

Describe any edge or corner cases in the UX.

When workout is started and user presses back button a dialog will be displayed to user for confirmation. No data will be stored in that case.

Describe any libraries you'll be using and share your reasoning for including them.

App will use following stable version of libraries, gradle version
Picasso – To handle image loading and caching
Version **com.squareup.picasso:picasso:2.5.2**

Appcompat V7 – To support earlier versions of Android.
Version **com.android.support:appcompat-v7:26.1.0**

Retrofit – Retrofit API to get data mock data from server.
Version **com.squareup.retrofit2:retrofit:2.1.0**

Retrofit Gson Convertor – Retrofit Gson parsing library
Version **com.squareup.retrofit2:converter-gson:2.1.0**

Gson Library – To parse the data in Gson library
Version **com.google.code.gson:gson:2.6.2**

Room Database Library – To store the data in db using Room and manage LiveData.
Version-
    android.arch.persistence.room:runtime:1.0.0
    android.arch.lifecycle:extensions:1.0.0
Annotation Processors -
    android.arch.persistence.room:compiler:1.0.0
    android.arch.lifecycle:compiler:1.0.0

Mockapi.io – Mock api to host the get the work-out details in JSON format.

YouTube Vide Player API – To integrate YouTube player within the app.
Version - **1.2.2**

FireBase API – To store data and authenticate users.
Version
       Firebase **com.google.gms:google-services:4.0.1**
       Firebase Auth **com.google.firebase:firebase-auth:16.0.2**
       Realtiem Database **com.google.firebase:firebase-database:16.0.1**

Gradle– Gradle for GetFit
Version **4.1**

Android Studio
Version **3.1.3**

Describe how you will implement Google Play Services or other external services.

Firebase Auth - To login and authenticate user using email, google and facebook
Firebase Realtime Database- To save workout details of user
Youtube API – To play motivational video within the app.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

Task 1: Project Setup

The app will use Firebase to authenticate user. App will get Workout details from Mockapi.io in JSON format. We will need to user Youtube api to play the motivational video within the app.

- Setup project dependencies in gradle
- Populate Mockapi JSON response

- Setup firebase for the project
- Setup Youtube api for the project

Task 2: Implement UI for Each Activity and Fragment

Implement the UI for following Activities and Fragment.
- Login Activity
- Workout Category Activity
- Workout Details Activity
- Workout Start/Stop Activity and Fragments
- Favorite Videos Activity
- Reports Activity
- Youtube Player Activity

Task 3: Implement Firebase Auth

Once Firebase is setup for the project, email authentication will be added using Firebase auth.

- Implement Firebase Auth for Email
- Implement Firebase Auth using Google
- Implement Firebase Auth using Facebook
- Navigations to next screen

Task 4: Implement Server Connection
Connect to Mockapi.io to get Fiteness Data
- Connect to Mockapi.io using Retrofit api
- Implement Room to store the fetched data locally.
- Populate the video and workout categories cards

Task 5: Implement workout category and List cards
Use Picssso to display the workout photos.
- Picasso implementation to download and cache the images
- Show timer on workout screen
- Implement workout fragments

Task 6: Implement Firebase Real-time Database

Implement Firebase Real-time and Room database to store workout details.

- Implement Firebase real-time database to store stats (Column userid, workout, duration, date)
- Implement Room database if required to store the data locally for offline usage.

Task 7: Implement Reports Screen

Implement reports screen

- Fetch data from Firebase Database and display the report.

Task 8: Implement Widget

Implement widget to show user the stats about today's workout. It will show a screen informing user that they need to do workout if no workout is done.,

- Implement widget
- Once workout is done. Store data in database using Room and Update App Widget via IntentService.
- Make necessary db connection to show workout report data.

Task 9: Implement Logout

Implement logout functionality

Task 10: Accessibility Support

App will support DDA/ Accessibility.

- Set content description to all the layout items providing information.
- Set content description to non-focusable/non description elements such as imageView.
- App will send accessibility announcements to inform user about workout information via TouchToExplore and fire accessibility announcements with additional information.
- App will make sure all the elements on screen are focusable to allow touch to explore and standard swipe left/right gesture navigate through screen.

Submission Instructions

- After you've completed all the sections, download this document as a PDF [File →

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    - Make sure the PDF is named "**Capstone_Stage1.pdf**"
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