

Introduction

The connection between the Layouts, Widgets, and Activities is important within the Android scope. Having a view that has an event that sends information to other activity/fragment is one of the most used characteristics of Android. Every day, either on Instagram, WhatsApp, Telegram, etc, you are doing this simple but powerful task. Thus, the purpose of this Challenge is for you to have views in one fragment that change a view in another fragment.

All the resources that you need are available at UCStudent but feel free to use the resources/images. For any questions or doubts, you can send an e-mail to tjcruz@dei.uc.pt.

Milestone 1

This first milestone is to be done in **groups**. The objectives are:

Have an application that contains 2 fragments:

Fragment 1

- Has a spinner that allows you to select an animal.
- Can display the image of the selected animal.
- Has three texts showing who is the owner, the name, and the age of the animal.
- Has button to change to Fragment 2 but Fragment 1 does not send any information to Fragment 2 (except the selected position of the spinner which you need to know which animal was selected).

Fragment 2

- Has two views that allow to enter a text and one view that allows to enter the age (hint: it is not a string value) of the animal.
- Has a button to return to Fragment 1.
- Every change made in Fragment 2 must be passed to Fragment 1's views (e.g., if you change the name of the animal in Fragment 2, this must be reflected when you press the button to return to the Fragment 1). However, you do not need to have all three values (owner, name, and age) fulfilled in Fragment 2 (you can have only the name, for example).
- You must use **Dynamic Fragments** and **ViewModel.** Fragments must be instantiated in the Activity.

Evaluation Criteria

Description	Value	
Fragment 1		
Spinner	5%	
Display of the image and details of the selected animal	5%	
Button to switch to Fragment 2 without passing information	5%	
Fragment 2		
Fields to enter name, owner and age of the animal	5%	
Button to return to Fragment 1	5%	
Reflection of changes made in Fragment 2 in Fragment 1	5%	

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Computação Móvel

Challenge 1



Communication and Data Persistence		
Communication between Fragments using ViewModel	20%	
Spinner selection persistence when changing Fragment	10%	
Dynamic update of the interface in Fragment 1 according to changes in	10%	
Fragment 2		
Use of Dynamic Fragments		
Implementation of Dynamic Fragments in the Activity	20%	
FragmentManager and creation of fragment instances	10%	

Deadlines and Evaluation

- The deadline is on October 17.
- There will not be any evaluation regarding this work. The evaluation will be based on the code that you submit to Inforestudante.

2024/2025 V1.1