

M1: ProjectDroid

Mobile Android Project

1 Introduction

In this assignment, students are required to develop of a Android application project in a team throughout the duration of some weeks. This project aims to develop students' skills in implementing native mobile applications for the Android platform. This project is to be made in groups of two students, of the same PL class, (exceptions must be approved), and delivered until **Week 9**. The project is to be performed outside classes.

Project presentation/demo will be during **Week 10**.

2 Themes/Topics

The mobile application developing in the context of this project cannot be limited to the mobile device. Such application has to **communicate with the world** . You can find a collection of free REST APIs for developers:

- <https://any-api.com/>
- <https://rapidapi.com/collection/list-of-free-apis>
- <https://restdb.io/>

You can find in the <https://193.136.62.24/swagger-ui.html> a REST API to manage a book library.

Further, it must explore features of the mobile devices, such as GPS, sensors, communication interfaces and others.

3 Project code

The mobile application has to be developed using Java programming language. The mobile application target platform has to be Android. Other components can be developed in any programming language. Any framework, library and other code can be used.

The Project code has to be available at Bitbucket/GitHub for instructors . Further, students have to give to each of them administration permission. For that purpose, use the following email addresses to find them in Bitbucket/GitHub:

- pbs@isep.ipp.pt
- caf@isep.ipp.pt

4 Schedule

Here, we consider the first week day is on Monday and the last week day is on Sunday. In this schedule, all deadlines are at 23:59 of the Sunday of the respective week. Therefore, whenever we mention **Week x** , the deadline is on Sunday at 23:59. The schedule for this assignment is as follows:

- **Week 3:** Submit your **team** by email to `pbs@isep.ipp.pt` with the following information: Student names and numbers as well as the class.
The **email subject** has to be in the form **DSSMV_ProjectDroid_XXXXXXXXXX_XXXXXXXXXX**, where **XXXXXXXXXX** are the student's numbers.
- **Week 6:**
 - Submit your **project theme/topic** by email to `pbs@isep.ipp.pt`. Provide some details about the project theme/topic as well as the **title** of the project.
The **email subject** has to be in the form **DSSMV_ProjectDroid_XXXXXX_XXXXXXXXXX**, where **XXXXXXXXXX** are the student's numbers.
All theme/topic MUST be discussed and approved by one of the course professors .
 - Create a Bitbucket/GitHub repository.
The **repository name** has to be in the form **DSSMV_ProjectDroid_XXXXXX_XXXX_XXXXXXXXXX**, where **XXXXXXXXXX** are the student's numbers.
- **Week 7 and 8:** Project check point.
The **project check point** will be carried out in PL classes. Each team has to present the project development progress at least once in these two weeks.
- **Week 9:** The final report must be submitted at Moodle.
This document should be delivered in the form of a report conforming to the **Survey Template** as available in Moodle: **SurveyFormat (doc)** and **SurveyFormat(latex)**.
The document can be written in **English** or in **Portuguese** and must contain the **Context, Analysis, Design, Implementation, and Tests** of the project.
Only **one member** of the team should submit a file with the following name: **DSSMV_ProjectDroid_report_XXXXXXXXXX_XXXXXXXXXX.pdf**, where **XXXXXXXXXX** are the student's numbers.
- **Week 10:** **Project presentation/demo**.
The presentation schedule will be announced after final report submission.
The application demo has to be done using a real device (emulator is not allowed)

5 Detailed Rubric

The project will be graded by the **Technical Report** (20%), and **Application** (80%).

5.1 Technical Report (20%)

Criteria	Weight	Exemplary (100%)	Accomplished (75%)	Satisfactory (50%)	Poor (25%)
Context, Analysis, Design, Implementation and Tests	100%	High quality description of the project.	Good quality description of the project.	Acceptable quality description of the project.	Poor description of the project.

5.2 Application (80%)

The final grade (fg) of final application/demo presentation is computed as follows:

$$\text{fg} = (\text{Checkpoint} * 0.20 + \text{Implementation} * 0.80) * \text{Factor}.$$

Criteria	Weight	Exemplary (100%)	Accomplished (75%)	Satisfactory (50%)	Poor (25%)
Checkpoint	20%	Clearly defines the topic and its significance; Presents key characteristics with an analysis of relevant and accurate evidence; Good evidence of teamwork; The Project application is executing.	Clearly defines the topic or thesis. Presents key characteristics; Reasonable evidence of teamwork; The Project application is executing.	Defines the topic; Presents most key characteristics; Evidence of teamwork sketchy; The Project application is executing.	Does not clearly define the topic; Presents little (or no) key characteristics; Little evidence of teamwork; The Project application is executing.
Implementation and demonstration	80%	High quality and completeness of the system; Evidence shown well aligned with project report;	Good quality and completeness of the system; Evidence shown aligned with project report;	Some important features missing; Not totally aligned with objectives/statements in project report;	Very simple features implemented; Demonstration lacking evidence of properly working features/system.

Criteria	Weight	Exemplary (100%)	Accomplished (75%)	Satisfactory (50%)	Poor (25%)
Factor (per team member)	[0-1]	Demonstrates extensive knowledge of the topic by responding confidently, precisely and appropriately to all audience questions and feedback	Demonstrates knowledge of the topic by responding accurately and appropriately to questions and feedback	Demonstrates some knowledge of the topic by responding accurately and appropriately to questions and feedback;	Demonstrates incomplete knowledge of the topic by responding inaccurately and inappropriately to questions and feedback

6 Themes/Topics and Teams

All approved themes/topics and teams are in the following list:

- 2DA

Team Number	Team elements	Title/theme	Penalty
1	Iúri Moutinho (1222027)	FootballManagement	0%
2	Vítor Teixeira (1232067), Miguel Silva (1241131), Lucas Santos (1241008)	CoverToCover	0%
3	Ruben Remelhe (1241847), Tiago Caetano (1241945)	PingMe	0%
4	Martim Alves (1240690), Afonso Sobreiro (1241013), João Vaz (1240908)	Filmes	0%
5	Afonso Ribeiro (1240857), Tiago Moreira (1240883)	My Bookshelf	0%
6	Diogo Fernandes (1240632), Rui Marinheiro (1241034)	BookMe	0%

- 2DB

Team Number	Team elements	Title/theme	Penalty
1	Mariana Santos,(1231239), Ana Marta Silva (1230859)	SnapFix	0%
2	Vasco Magolo (1231562), Francisco Silva (1230985)	RTCT	0%
3	Larsen Tivane (1231948), Lorena Araújo (1231658)	MyAnimeTracker	0%
4	Alexei Godea (1241115), Miguel Santos (1240568)	Biblioteca de música	0%
5	Raul Choupina (1230593), Francisco Falcão (1222100)	biblioteca	0%
6	Gonçalo Azevedo (1230628), Tiago Silva (1201107)	Health Up	0%
7	José João Pereira (1240715), Francisco Carvalho (1241484)	app meteorológica	15%
8	José Alves (1240624), Gustavo Abrantes (1231121)	Pantry Guardian	60%

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Team Number	Team elements	Title/theme	Penalty
1	Benedita Zuzarte (1240695), David Santos (1241447)	ConnectMe	0%
2	Guilherme Neto (1221392), Henrique Gonçalves (1200968)	biblioteca	0%
3	Lucas Santana (1230550), Mário Resende (1201589)	Book library	0%
4	Pedro Silva, (1230585), Rodrigo Faria (1242036)	Apoloplay	0%
5	José Neto (1211104), Carlos Oliveira (1220806)	LibraSys	0%
6	Pedro Cunha (1231690), Pedro Sousa (1230773)	PP Workout	0%
7	Gonçalo Gomes (1221928), Guilherme Soares (1221904)	biblioteca	0%
8	Filipe Cardoso (1201286), Evandro Carvalho (1200929)	Relato de Ocorrências Urbanas	0%
9	Gonçalo Ribeiro (1241164), Gustavo Pinho (1241402)	Biblioteca	25%
10	Gonçalo Ferreira (1241271), João Cunha (1241237)	ForaDeJogo	25%

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Team Number	Team elements	Title/theme	Penalty
1	Ana Lagame (1221410), Igor Ferreira (1211907)	Spotify	0%
2	Gonçalo Matos (1241270), Ricardo Monteiro (1240842)	Movie Watchlist	0%
3	André Moreira (1240567), Diogo Nogueira (1241692)	Tick it	0%
4	Gustavo Campos (1231051), Filipe Parafita (1231283)	MúsicaPósGalos	0%
5	Maximino Kokots (1211378), Rúben Silva (1240708)	book library	0%
6	Tomás Costa (1230738), João Simão (1200969)	JTBiblioteca	0%
7	Ricardo Barbosa (1211322), João Teixeira (1211339)	Spotify	0%
8	João Carvalho (1211686), Diogo Silva (1200858)	FlashScore	15%