

M2: ProjectReact

Mobile Cross-platform Project

1 Introduction

In this assignment, students are required to develop a project in a team throughout the duration of some weeks. This project aims at developing students' skills in the cross-platform mobile application implementation.

The assignment is to be made in groups of two elements, of the same PL class, (exceptions must be approved), and delivered until **Week 15**. The project is to be developed outside classes. Project presentation/demo will be during **Week 16**.

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>

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

It must exploit the Create, Read, Update and Delete (CRUD) operations of REST APIs. Further, the use of more than one REST API is appreciated.

3 Project code

The mobile application has to be developed using React Native framework.

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 11:** Submit your **team** and **topic/theme** by email to `pbs@isep.ipp.pt`.
The **email subject** has to be in the form **DSSMV_ProjectReact_XXXXXXXX_XXXXXXXX**, where **XXXXXXXX** are the student's numbers.
All theme/topic MUST be discussed and approved by one of the course professors.
- **Week 12:** Create a Bitbucket/GitHub repository.
The **repository name** has to be in the form **DSSMV_ProjectReact_XXXXXXXX_XXXXXXXX**, where **XXXXXXXX** are the student's numbers.
- **Week 13 and 14:** 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 15:** 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_ProjectReact_report_XXXXXXXX_XXXXXXXX.pdf**, where **XXXXXXXX** are the student's numbers.
- **Week 16:** **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
-------------	---------------	-------------	---------

- 2DB

Team Number	Team elements	Title/theme	Penalty
-------------	---------------	-------------	---------

- 2DC

Team Number	Team elements	Title/theme	Penalty
-------------	---------------	-------------	---------

- 2DD

Team Number	Team elements	Title/theme	Penalty
-------------	---------------	-------------	---------