USABILITY TEST PLAN FOR

Human Computer Interaction

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1.Introduction

1. Purpose

The purpose of this document is to provide the development and testing team with a detailed plan of the activities to be carried out for the evaluation of the software prototype, which in this case is a web page that provides benefits to university students.

2. Scope

This test plan focuses on the usability factor, so we will evaluate non-functional requirements. The objective of this document is to have measurable results of the different aspects of the usability factor to establish an analyzed qualification of the software prototype for subsequent decision making.

3. Usability Objectives

- Determine if the non-functional requirements to be evaluated are satisfactorily met.
- Measure user satisfaction while browsing the website in search of benefits according to their needs.
- Identify usability problems in the user interface, which have a negative impact on effectiveness and efficiency.

4. Prioritization

Usability Requirements	**Reason for testing exclusion**
UR01.- User-friendly design that enables easy navigation and a seamless user experience.	
UR02.- The system shall provide accurate information	Until the system is online, it will not have access to information in real time
UR03.- The user will be able to reach the required information in a maximum of 5 clicks.	

UR04.- The information will be easy to read.	
UR05.- The information will be easy to understand	
UR06.- The colors used will not hurt the user's vision with prolonged use	

2.Usability metrics

. Task completion time: Measure the time users take to complete specific tasks in the interface considering the average number of taps necessary.

- Fast: Users can complete the task in a fewer taps.

- Moderate: Users take a little more than the average number of taps to complete an activity.

- Slow: Users take more than the average number of taps to complete a task.

2. Task success rate: Calculate the percentage of users who successfully complete a specific task.

- High: More than 80% of users successfully complete the task.

- Moderate: Between 50% and 80% of users successfully complete the task.

- Low: Less than 50% of users successfully complete the task.

3. Intuitive navigation: Evaluate the ease with which users can navigate the interface.

- Easy: Users quickly find the information they are looking for and can perform actions without difficulty.

- Moderate: Users can find the information or perform actions, but it requires some effort or additional time.

- Difficult: Users struggle to find information or perform actions and experience frustration.

4. User satisfaction: Use surveys or brief questionnaires to measure users' overall satisfaction with the interface.

- High: The majority of users express high satisfaction and have no significant issues with the interface.

- Moderate: Most users are satisfied but have some suggestions or areas for improvement.

- Low: Users show low satisfaction and express significant difficulties with the interface.

3.Test planning

1. Description

To test the usability of the website, we will focus on the following activities:

- Locate a specific article with the search bar.
- Browse the page to find information about the requirements and deadlines of the scholarship/benefit according to your category.
- Register your email to receive information on scholarship/benefit updates.
- Read an article and return to the Main page.

2. Tasks steps

This section lists the actions that the user must perform on the prototype.

1. Locate a specific article with the search bar.

Start	Home page – Search bar
Scenario	You are a university student who has just entered the web to find relevant information for a specific benefit or scholarship.
Steps	
1	The student presses enter on their keyboard or the search button next to the bar.
2	The student views the results.
3	The student moves the cursor to the desired item name and left-clicks or simply taps on it.
End	Article page - information panel.

2. Browse the page to find information about the requirements and deadlines of the scholarship/benefit according to your category.

Start	Home page – Main panel
Scenario	You are a student who has just entered the website and wants to find an article of some category.
Steps	
1	The student clicks on a category on the navbar or taps on it.
2	The student can see a list of articles ranging from the most recent to the oldest.
3	The student places the cursor and clicks on the name of an article or simply taps on it.
End	Article page - information panel.

3. Read an article and return to the Main page.

Start	Article page - information panel.
Scenario	You are a student who found an article, is predisposed to read it and return to the home page.
Steps	
1	The student reads the information presented.
2	The student scroll down using the sidebar or by sliding your finger down.
3	When you finish reading, press the Gradup logo or the Homepage button to return to the main page
End	Home page – Main panel

3. Selection of participants

The participants of the usability tests will be students who are behind in their studies in the mathematics department and/or are at risk of dropping out. A number of 5 students is expected for the tests, since it is the "Magic Number" of UX usability tests according to Ellie Martin.

4. Responsibilities

Rol	**Responsibility**	**Staff**
Moderator	**Responsible for directing and explaining the tasks in the tests**	
Measurement Leader	In charge of the Usability test session activities.	
Interviewer	Apply the User Satisfaction questionnaire to the participants	
Recorder	Take evidence of the tests and document the results	
Analysts	Analyze the results and draw conclusions from the tests	

5. Instruments, Tools

Mobile Device: Device where the user will perform the task.
Computer: Device where the user will perform the task.
Figma: We used Figma to make and present our interface prototypes which the user will manipulate to achieve the task of the usability test.

6. Data Storages

https://github.com/DarozZero/Fmat-Proyect

7. Usability test session

Each usability test session has a total estimated maximum time of 17 minutes. The sessions will consist of the following activities:

4. Introduction

Estimated maximum time: 3 min.

The moderator should greet him or her and inform about the following:

- Presentation of staff.
- Present general information about the usability tests:
- Tell the participants that this study is part of an assignment of Human-Computer Interaction
- Describe to the participants the general purpose of Gradup.
- Tell the participants the estimated time for each task of the study in minutes.
- Say to the participants the general details of the dynamic.
- Tell the participants that the dynamic will be recorded due analysis objectives.

5. Tasks application.

Estimated maximum time: 12 min.

First and before beginning with the tasks, we need to bring **prototypes of Figma** to the participants and give a little explanation of how it works. To navigate around the tool, what can they do and what they can't. Then, the motherador indicates the initial screens of each task and begins with the test.

- For each task, participants have 4min maximum to complete it.
- Before the begin of the thest, the motherador should tell the participants:
    - For each task, they can give up at any time they want.
    - They must think aloud their thoughts while they are in the test.
    - They can ask any doubt about the tasks to the moderator even when the test has begun.

- If the participant completes the task, give up or can't complete it on time, the next data must be recorded and registered in the **results:**
    - **Last step reached:** the last step they reached according to the established steps of each task. If the participants are not able to complete the tasks, the number of the last step is recorded anyways.
    - **Average number of taps:** The number of taps performed by the participants during the interaction with the prototypes.
        - It is important that redoing a task doesn't add up the number of steps.
- After the participant finishes the tasks, ask them to answer the satisfaction questionnaire. Tell them that the answers are totally private, and no one should see what they answer.

6. Closeup

Estimated maximum time: 2 min.

- Thank the participant for his or her valuable time and insights.

8. Result reports

The links to the results obtained in each task are listed below:
https://drive.google.com/file/d/1TT_FoS34cENt3Avh2-SnnL7VBhKg3NS5/view?usp=share_link
https://drive.google.com/file/d/18kZ2rCAdkdze3167cG9ARxRlhI9Ok9C6/view?usp=share_link
https://drive.google.com/file/d/1gH_s5L09AO8ITbgFpSBtkJUUS8FGuqym/view?usp=share_link
https://docs.google.com/forms/d/e/1FAIpQLSdU87ynIKJ0oGYIMelcOVRZepJB2qKQAKvknCgI4OxIk8Gfwg/viewform?usp=sharing

9. Analysis

Task.1 Locate a specific article with the search bar.

In general, in this task all the tests were successful and accurate, in addition to the fact that the 5 testers managed to finish them without any difficulty since it only consists of selecting an item once the search has been carried out, so there was a success rate of 100%. % In these tests it was obtained that the average number of taps in the interface was 5.

For the tests that failed, no data was obtained as everyone was able to complete the tests. The previous case is repeated with the dropout tests since no tester stopped performing the tests.

Task.2 Browse the page to find information about the requirements and deadlines of the scholarship/benefit according to your category.

This task consists of the user finding information about a scholarship/benefit from the categories. Like the previous task, this one was tested with 5 testers, and they had an average of 3 touches. In this case the success rate was 80% with an average of 4 taps.
In the case of tests that failed, there were 20% remaining, in this case they had a higher average number of touches, which was 8. As in the previous task, no cases of abandonment were obtained.

Task. 3 Read an article and return to the main page.

This task is performed once the user is in the article, where he only clicks the button to return to the main page. The tests were conducted with 5 testers with an average of 3 taps. This test was completed with a 100% completion rate and an average of 8 touches.
Since all the testers completed the test, there were no cases of test failure or dropouts.

4. Conclusion.

The usability tests for the software prototype showed positive results overall. Participants were able to complete the tasks successfully with a relatively low number of taps. However, there were some areas for improvement, particularly in Task 2 where there were test failures and a higher average number of taps. The prototype has good usability, but some issues need to be addressed to enhance the user experience.

Annex AA.1. Template of Average taps results

Average taps results

Task name: _____

Date: _____

Generated by: _____

General	
Number of testers	
Average number of taps	
Direct success	
Rate	
Average number of taps	
Indirect success	
Rate	

Average number of taps	
Give-up	
Rate	
Number of taps	
Last step	

Steps	**Description**	**Screenshot**