

HCI - Assignment n.2

Design and prototyping of an application using a human-centered approach

Final presentation and demo

Project Title: ScoutPanel

Group: Daniel Silva, Marco Almeida, Adalberto Vaz do Rosário

Lab Class: P5

Introduction

ScoutPanel

- ScoutPanel is a platform that allows scouts (or their parents) to perform actions and consult information related to their scout unit
- We chose this project because one of the members of the group is a scout and knows the movement very well.
- We have personal interest in this project because as our colleague would like to implement this project in the real world, we as a group would like to take the opportunity to, in addition to doing the project from an academic point of view, also live the work experience in the real world.

Project Objectives

ScoutPanel

- High-level goals:
 - Share photos with other scouts/parents;
 - Pay fees through online platforms;
 - Check members' payments as admin;
 - Manage enrolled scouts.
- Expected outcomes:
 - Having a platform with a simple (and easy to navigate) user interface and the aforementioned features.
- Benefits:
 - Communication between members without needing an external platform (e.g. Facebook, Whatsapp);
 - Less reliance on paper records for management;
 - Common news feed available to all members.



Personas

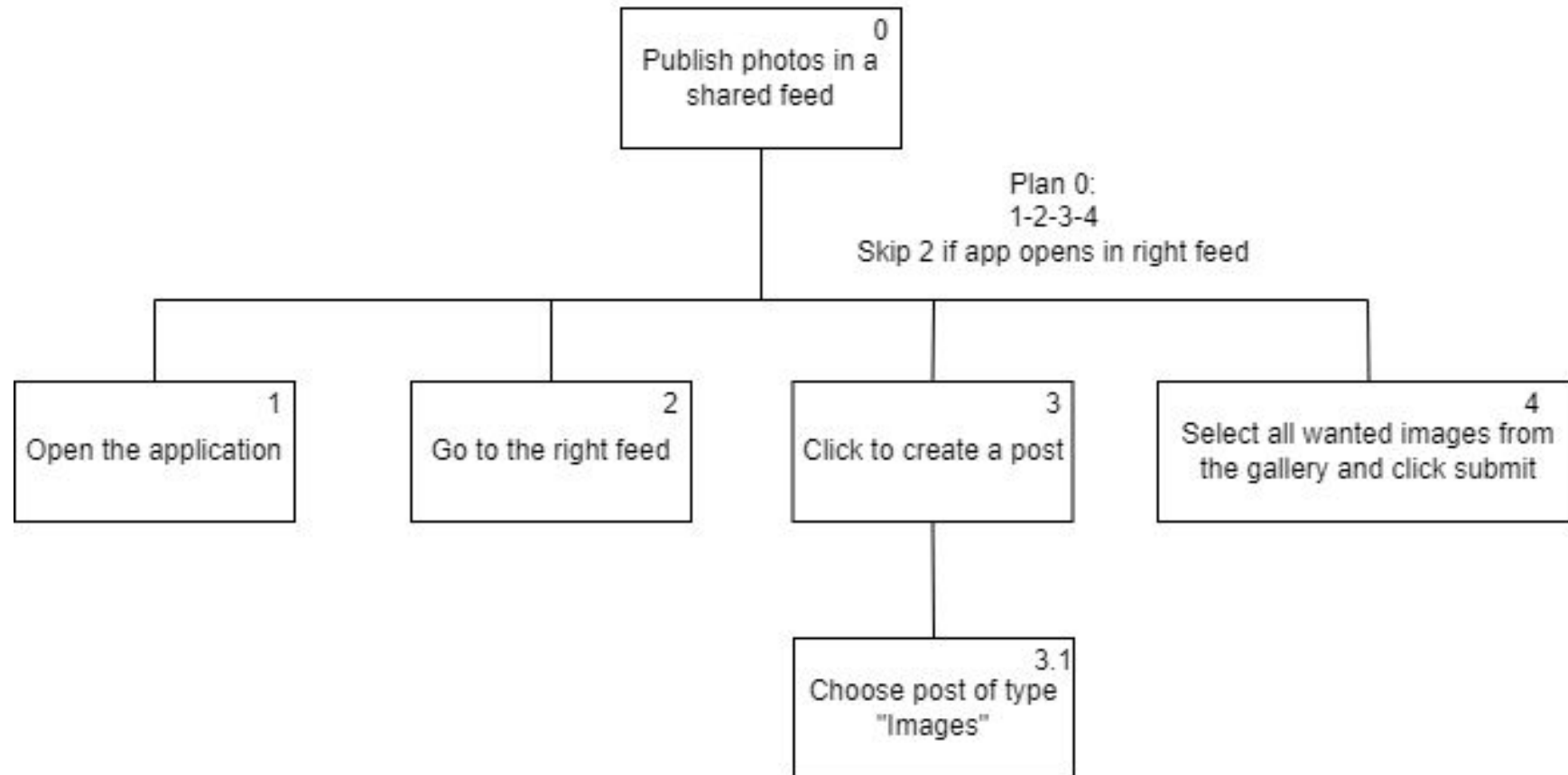
- Maria Alves
 - 19 years old
 - Student
 - Is enrolled in the Movimento de Escuteiros de Trindade, group nº 2
 - Would like to share photos that she took during activities with the other scouts and parents
- Gabriel Nogueira
 - 30 years old
 - Professor
 - Leader of scout group nº 2
 - Would like to manage the list of enrolled scouts and verify their payments without needing to check paper records



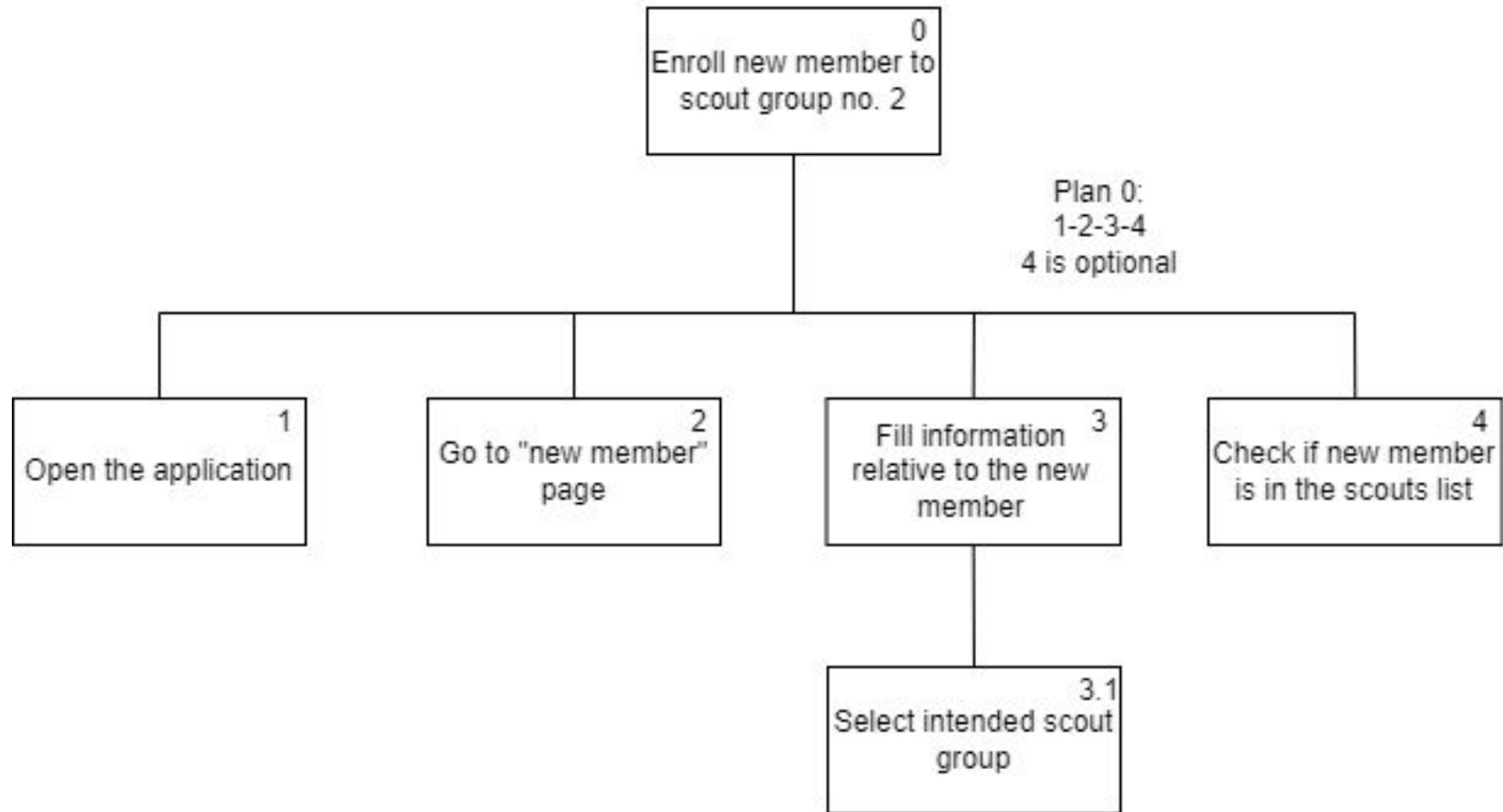
Scenarios

- Scenario 1:
 - Maria took a lot of photos during the last scout activity and now wants to share them.
 - To do this, she will open the ScoutPanel platform and post the photo album in a feed that is shared between all members.
 - Her colleagues will be able to check the post.
- Scenario 2:
 - Gabriel wants to enroll a new member to the scout group nº 2.
 - To do this, he will open the ScoutPanel platform and go to the “new member” page.
 - He will fill all the information about the new member and submit the registration form.
 - The new member will be added to the members list.

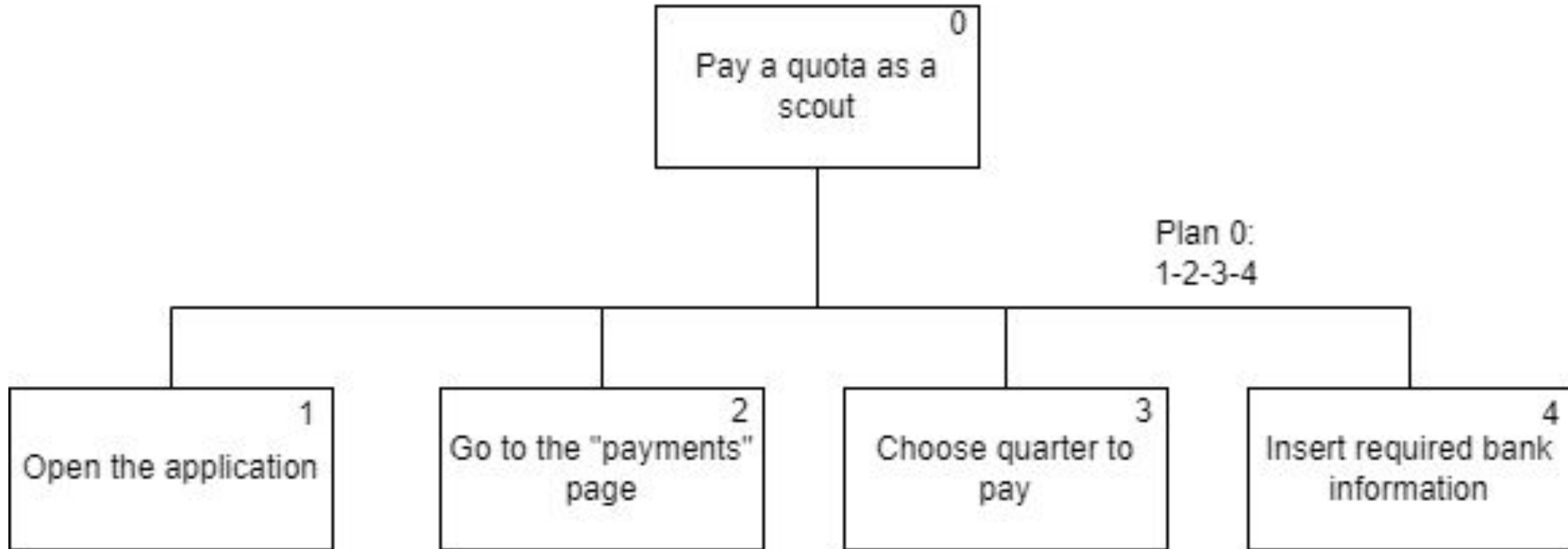
Tasks



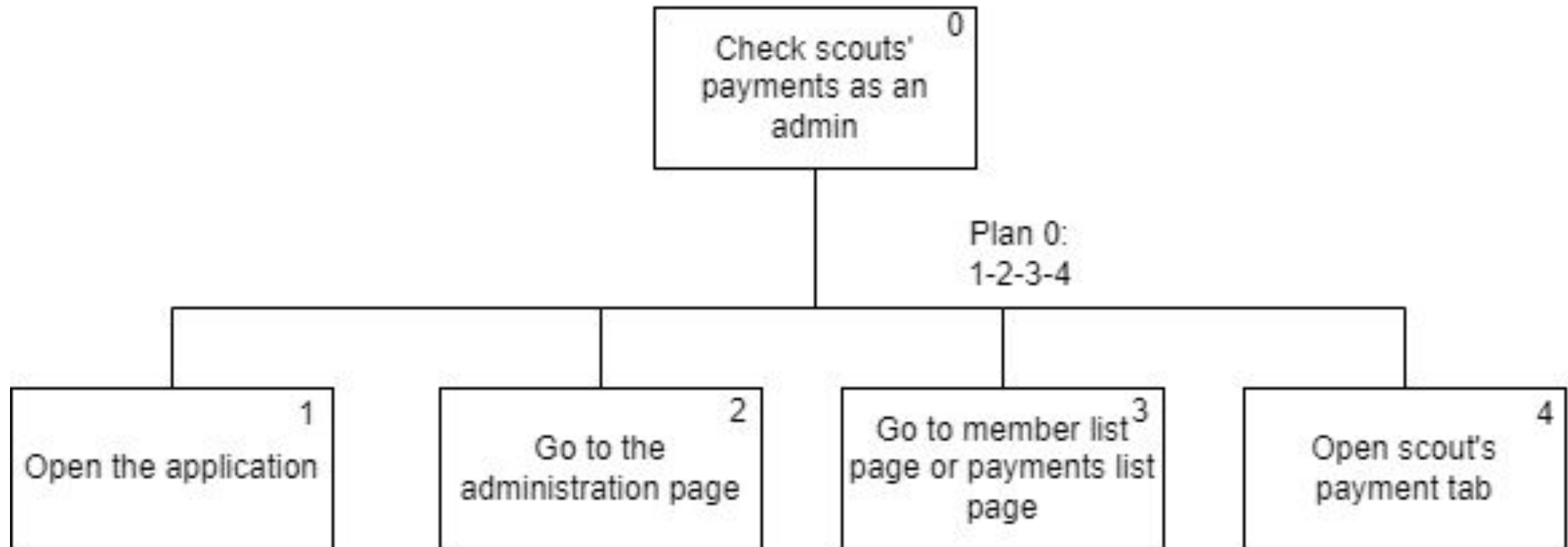
Tasks



Tasks



Tasks



Requirements

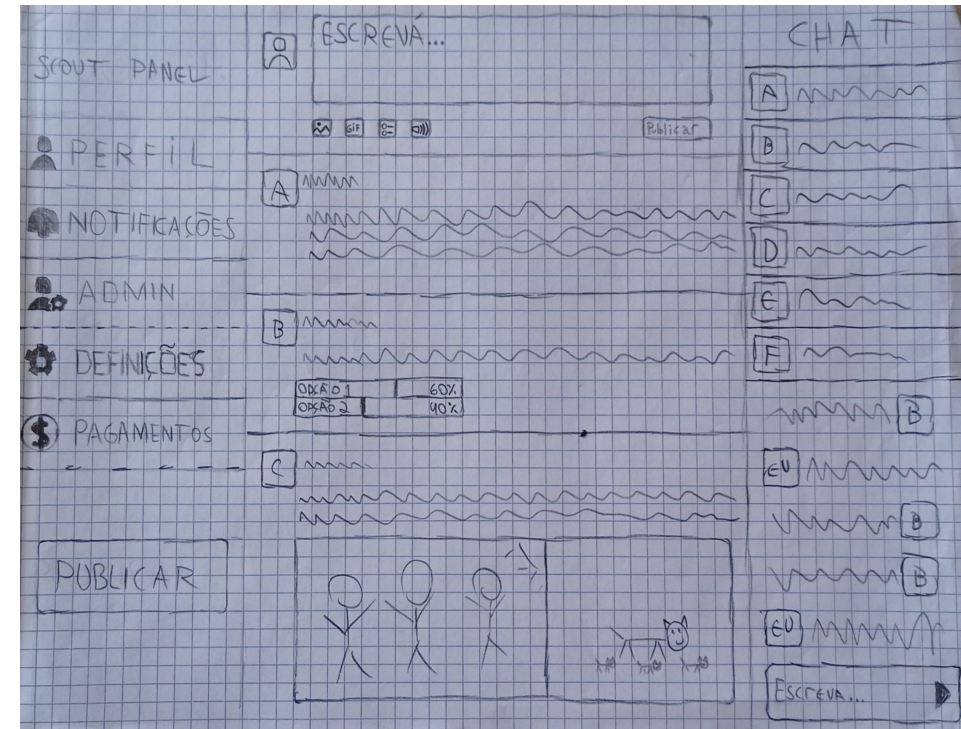
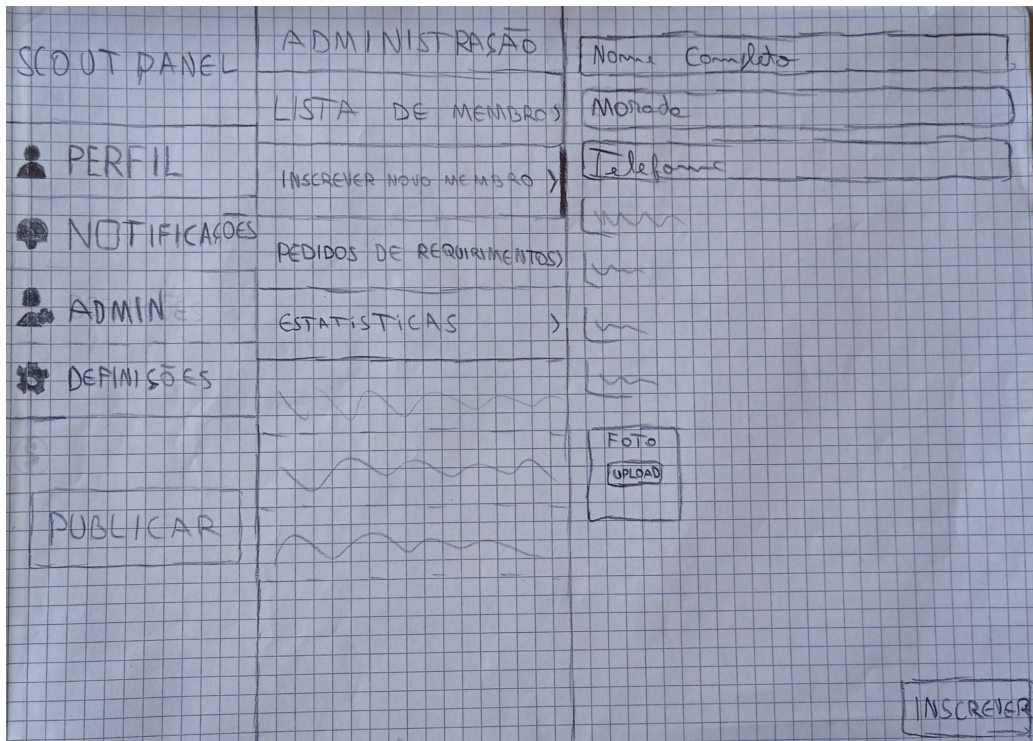
- **Non-functional requirements** – The system must have fast feedback; It must be intuitive to use, have 100% availability and guarantee the security and privacy of users.
- **Functional Requirements** - Pay fees in the platform; Consultation of the scouts' personal data/payments; Share and publish photos of activities; Enroll new members in a scout group.



Low Fidelity Prototype (LFP)

ScoutPanel

- We used a paper prototype to demonstrate how a user would perform some of the main tasks.



LFP User Evaluation

ScoutPanel



- We wanted to evaluate: Usability, ease of use.
- Personas: Maria Alves and Gabriel Nogueira
- Scenarios: [Scenario 1](#) and [Scenario 2](#)
- We used 3 tasks, of which: Publish Photo, (Admin) Enroll new member, pay quotas;
- 11 participants evaluated our prototype, all were students.
- Main results:
 - Publish button is hard to find;
 - Add a X in the enroll new member pop up.
 - In general, easy and straightforward usage.

Platform Used for the functional prototype

ScoutPanel

- Platform built with HTML, CSS and JavaScript, to be accessed on a browser.
- To build the interface we used Svelte, that makes it very easy to introduce reactivity into a web app.
- We also used Bootstrap, to help us improve the design of the interface.
- Visual Studio Code used as IDE, and GitHub as version control platform.



User Evaluation of the functional prototype

ScoutPanel

Task 1 → Publish photos in a shared feed(Scout).

Task 2 → Enroll new member to scout group no 2.

Task 3 → Show How many months Ana Laura Barros scout has in debt.

Task 4 → Pay a month's debt(Scout dues).

- 8 participants(1 -> F, 7-> M):
 - 7 Students
 - 1 Teacher

User Evaluation of the functional prototype

ScoutPanel

Tasks\Users	1	2	3	4	5	6	7	8
T1- Publish photos in a shared feed(Scout)	5	5	5	5	5	5	5	5
T2- Enroll new member to scout group no 2.	5	5	5	5	5	5	5	4
T3 - Show How many months does Ana Laura Barros scout have in debt	5	5	5	5	5	5	5	5
T4 - Pays a month's debt(Scout dues)	5	5	5	5	5	5	5	5

- All users completed all tasks successfully.

Heuristic Evaluation

ScoutPanel

- After an evaluation of the functional prototype, the comments of the users were saved and a heuristic evaluation was performed with it to determine the degree of severity of the problems.
- Issues 1, 2 and 5 were solved in the final version of the prototype

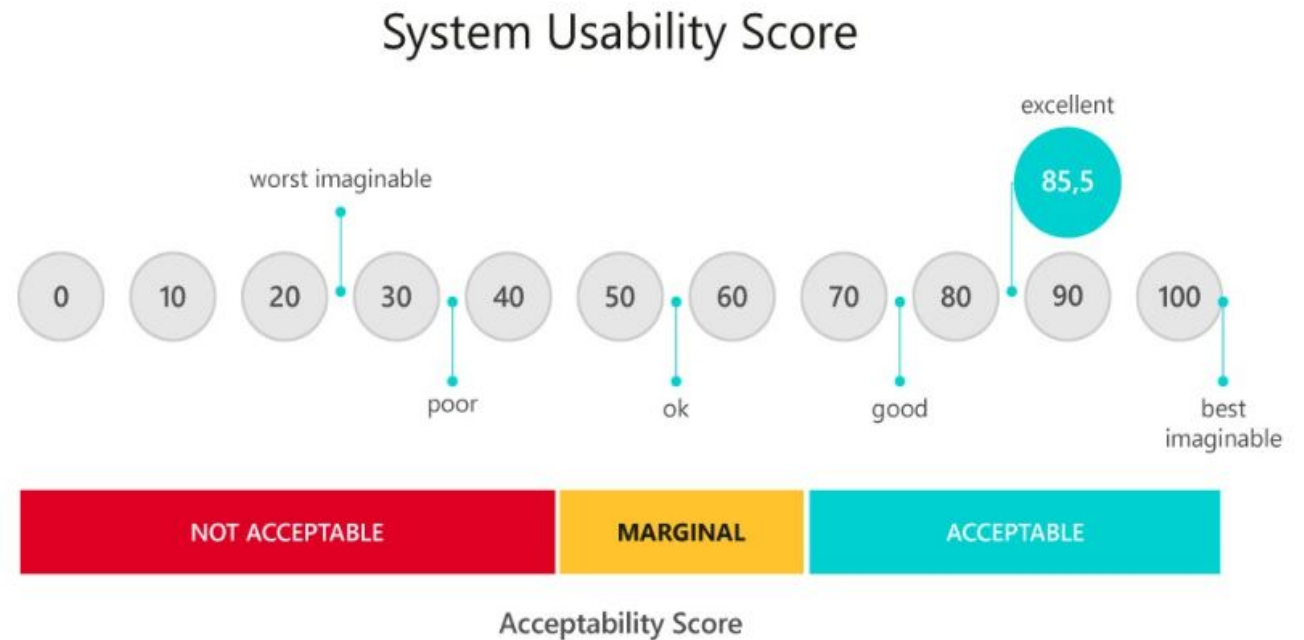
Problem	Heuristic	Severity
Have tab for payments	3	2
Display required fields when typing	3	3
Lack of feedback when posting photos (previews should appear)	3	3
Date input has to be better	1	1
Show list of likes, comments	2	2
When switching from Admin mode we can still see admin stuff	4	3

System Usability Scale

ScoutPanel

- $((16 + 27 + 27 + 28 + 21 + 22 + 22 + 24 + 27 + 28) * 2,5) / 7 = 86,4$


According to the result we can conclude that our system has few usability problems.



Demo

ScoutPanel



 Scout Panel

Perfil


Notificações

Pagamentos


Definições

Publicar


Modo de Administrador

 Escreva algo...


Publicar


 Maria Nunes


Grande dia!





Contatos

 Marco Almeida

 Daniel Silva

 Adalberto Rosário

 Maria Nunes

 João Rosa

João Rosa


Ativo que se viu a uma

Qual?

Dia 26

Vemo-nos lá então!!

Enviar

 Scout Panel

Perfil

Notificações

Administração

Definições

Publicar

Modo de Administrador

Lista de Membros

+ Inscrever Membro

Pedidos de Requerimentos

Estatísticas

Lista de Pagamentos

Os Meus Pagamentos

Divida trimestral Q1 - Pago a 09/02

24,99€

Divida trimestral Q2 - Em dívida

Pagar

24,99€

Divida trimestral Q3 - Em dívida

Pagar

24,99€


Divida trimestral Q4 - Em dívida

Pagar


24,99€

Lista de Membros


Pesquisar por nome

 Marco António Alves Almeida


▼

 Daniel Alexandre Martins da Silva


▼

 Adalberto Júnior Trindade Vaz do Rosário


▼

 Maria Julia Nunes

▼

 João Vitor da Rosa

▼

 Ana Lúcia da Mota

▼

HCI 2022-2023

18

Future work

- The app should be more reactive and usable on a phone.
- More pages and sections such as profile page, notifications page, and settings page should be developed.
- Database integration.

Effort of each group member

- Adalberto Jr.: $\frac{1}{3}$
- Daniel Silva: $\frac{1}{3}$
- Marco Almeida: $\frac{1}{3}$



Thank you!