



deti

universidade de aveiro
departamento de eletrónica,
telecomunicações e informática



Sistema de Gestão de Atividades Profissionais Confiáveis para Formação Médica na UA

M2 - Elaboration Phase: Requirements Elicitation

Grupo 3

Pedro Ponte - 98059

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Carolina Silva - 113475

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CONTEXT



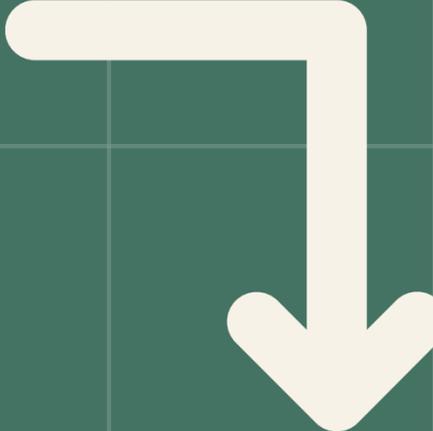
PAIS
Universidade de Aveiro vai abrir curso de Medicina
A atual proposta envolve ensino na UA e orientação tutorial clínica em três Unidades Locais de Saúde, designadamente a ULS Região de Aveiro, a ULS Entre-Douro-e-Vouga e a ULS Gaia/Espinho, no âmbito do Centro Académico Clínico Egas Moniz Health Alliance.



New Medicine course at UA

Constant evolution of students

Evaluation on paper



Integrated digital system for managing Entrustable Professional Activities (EPA)

PROBLEM

- Too much information on a single sheet of paper
- Difficult organization between student and tutor
- Lack of feedback and statistics



STATE-OF-THE-ART

| |  EPA Tracking Tool |  SIMPL |  |  |  |
|---|---|---|---|---|---|
| Official Integration with University |  |  |  |  |  |
| EPA Evaluation complete detailed history |  |  |  |  |  |
| 1:1 Easy connection between Tutor and Student |  |  |  |  |  |
| Automatic individual statistics generation |  |  |  |  |  |
| Locate family health unit (USF) |  |  |  |  |  |
| Offline Tolerance for Minimum Functionalities |  |  |  |  |  |
| Reevaluation requests |  |  |  |  |  |

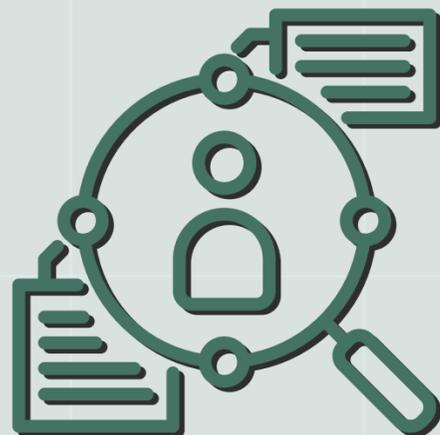
REQUIREMENTS GATHERING



Analysis of the current systems



Brainstorm meetings to come up with innovative ideas



Analysis of the characteristics and needs of the target users.



Meeting with the coordinator of Medicine



Functional Requirements



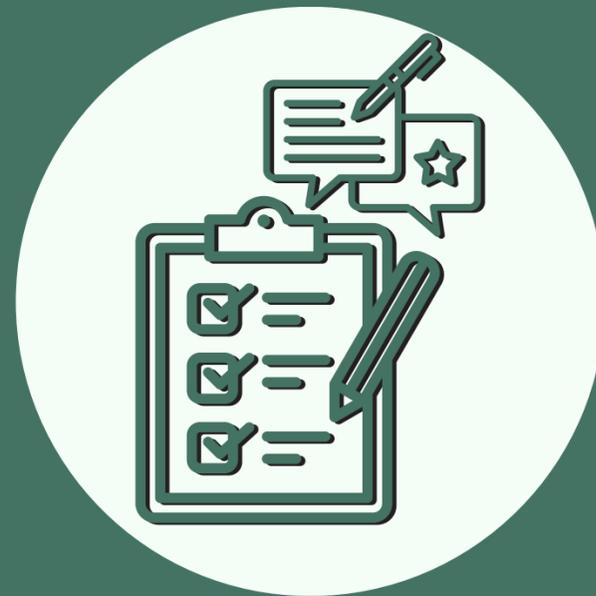
User Authentication



Notifications



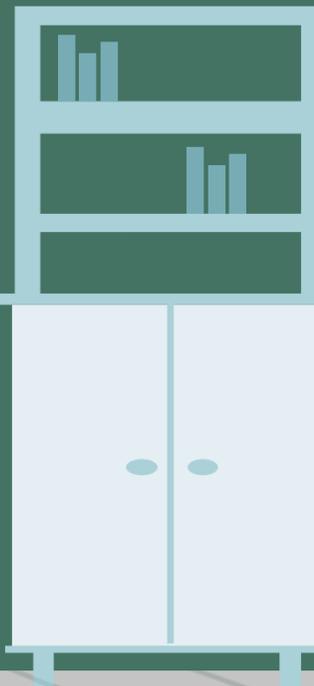
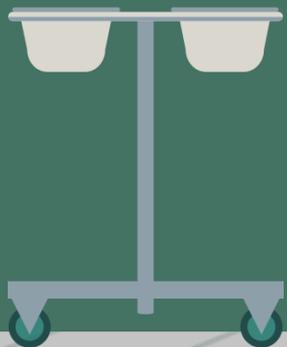
Statistics



Evaluation and Feedback



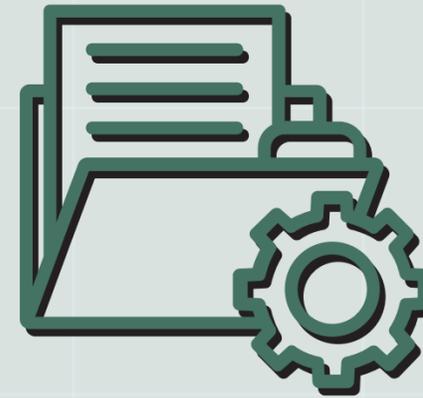
Generation of Excel/PDF files



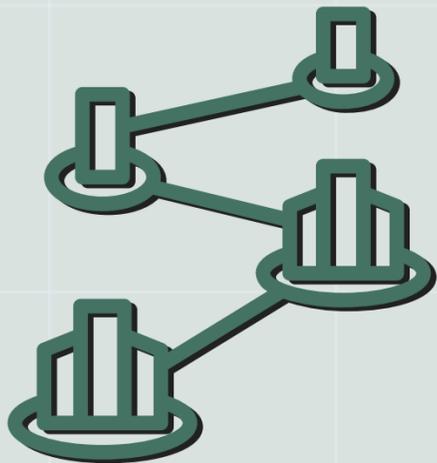
Non-Functional Requirements



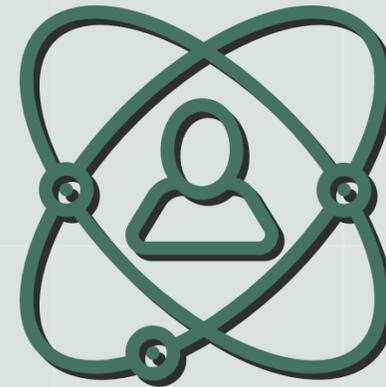
Performance



Maintainability



Scalability



User
Experience



Security
and Privacy



Offline
Functionality

ACTORS

- **Medical Student**
- **Tutor**
- **Administrator**



Use Cases

Student:

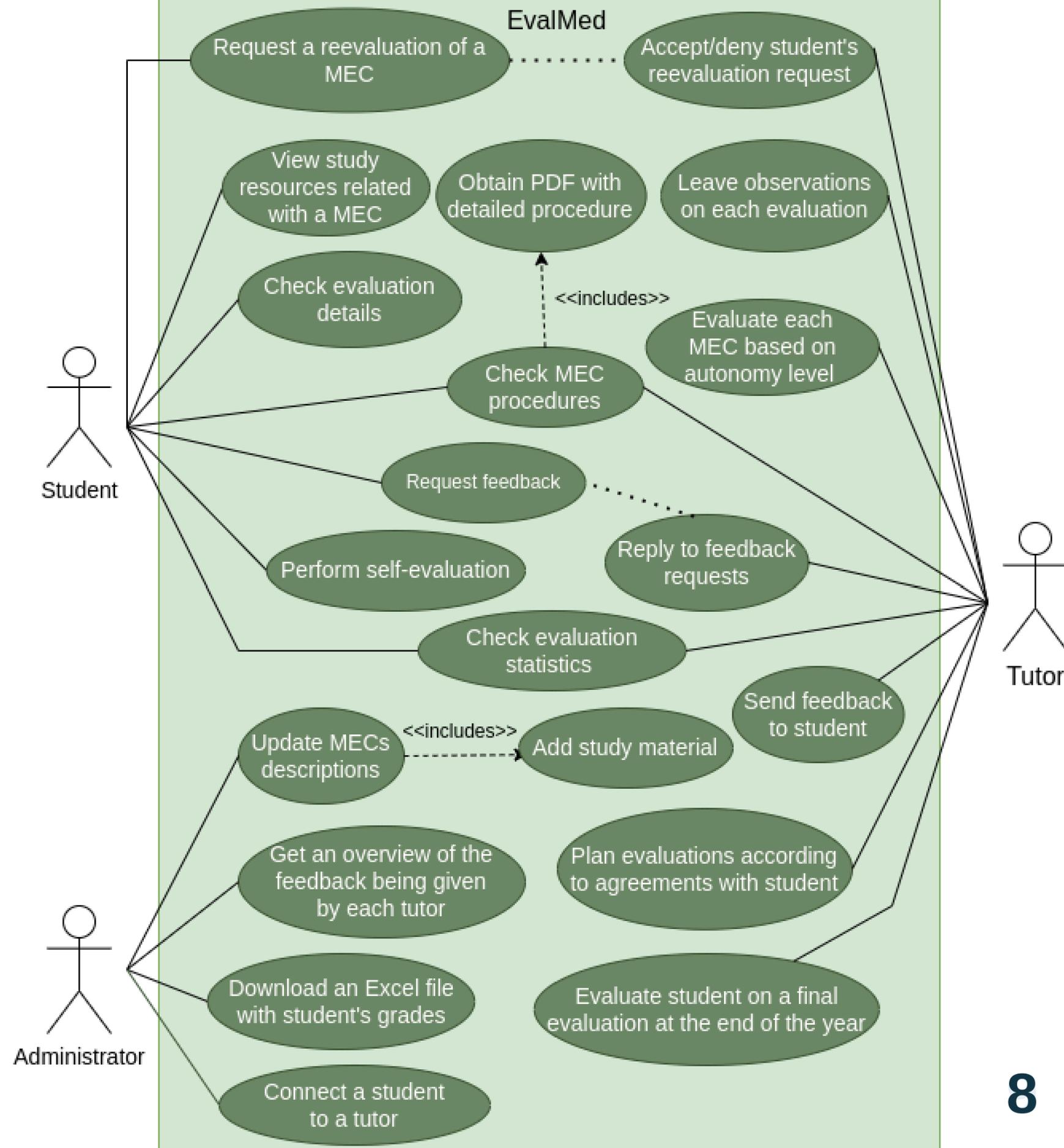
- See details about evaluations
- Request reevaluations/feedback
- Perform self-evaluation
- View study resources
- Check statistics

Tutor:

- Evaluate student
- Send feedback
- Plan evaluations

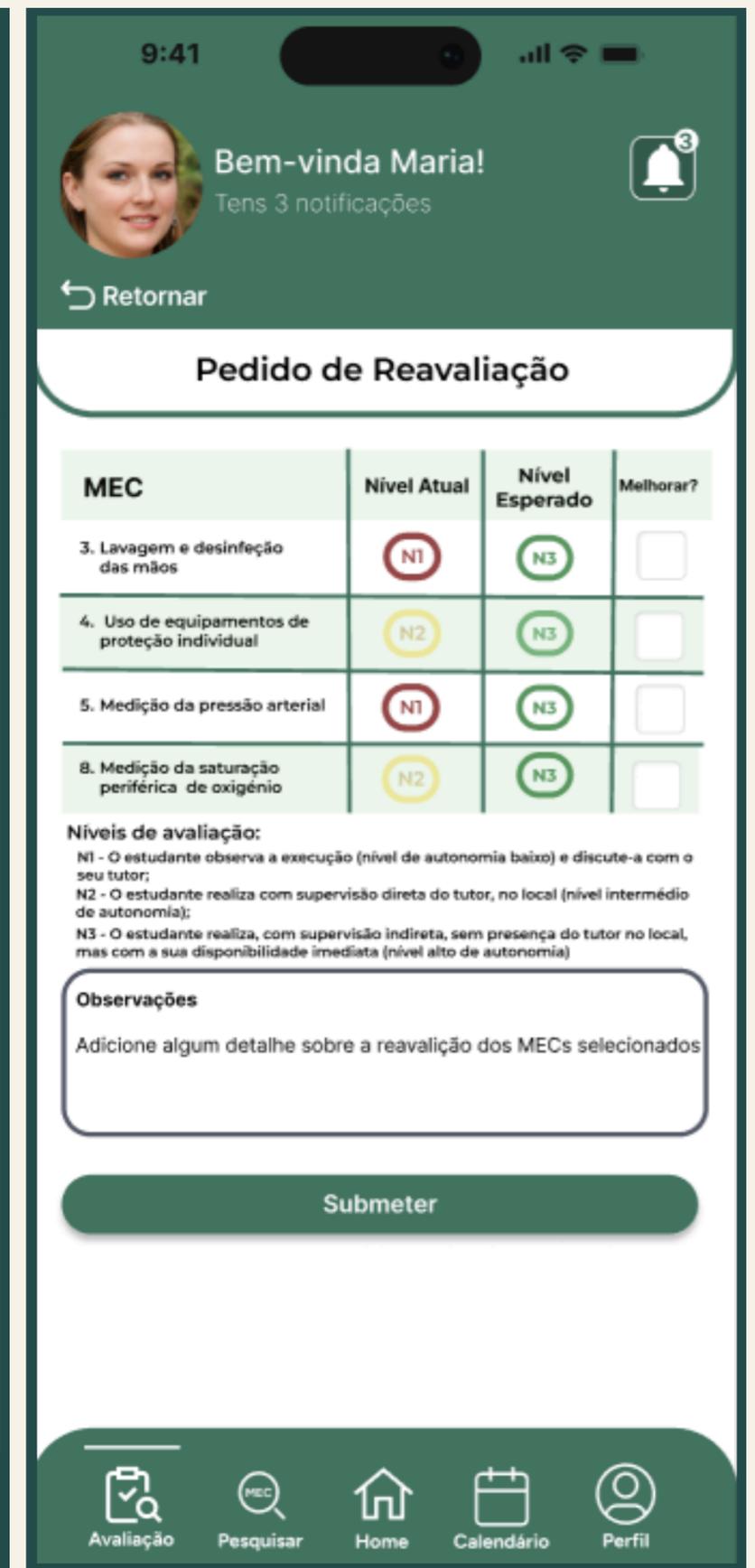
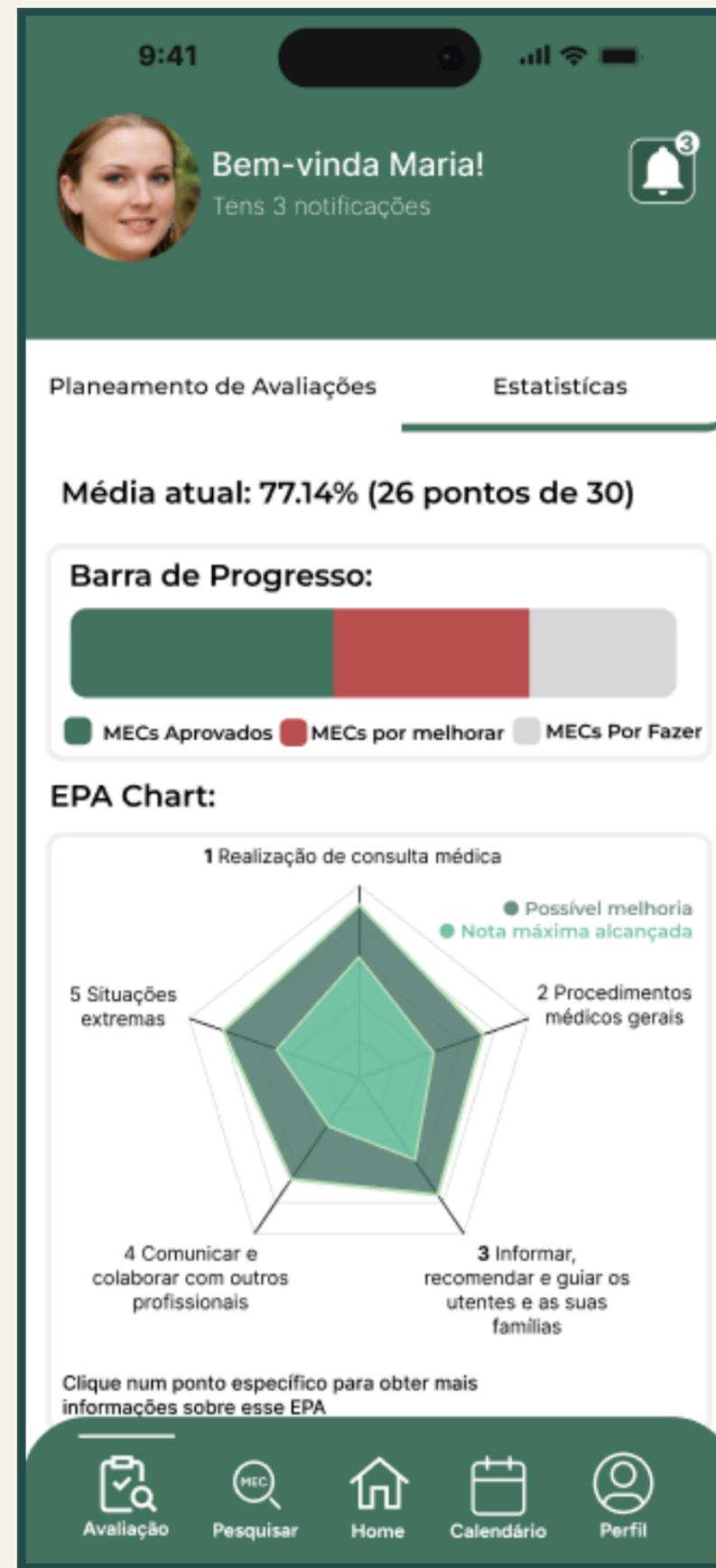
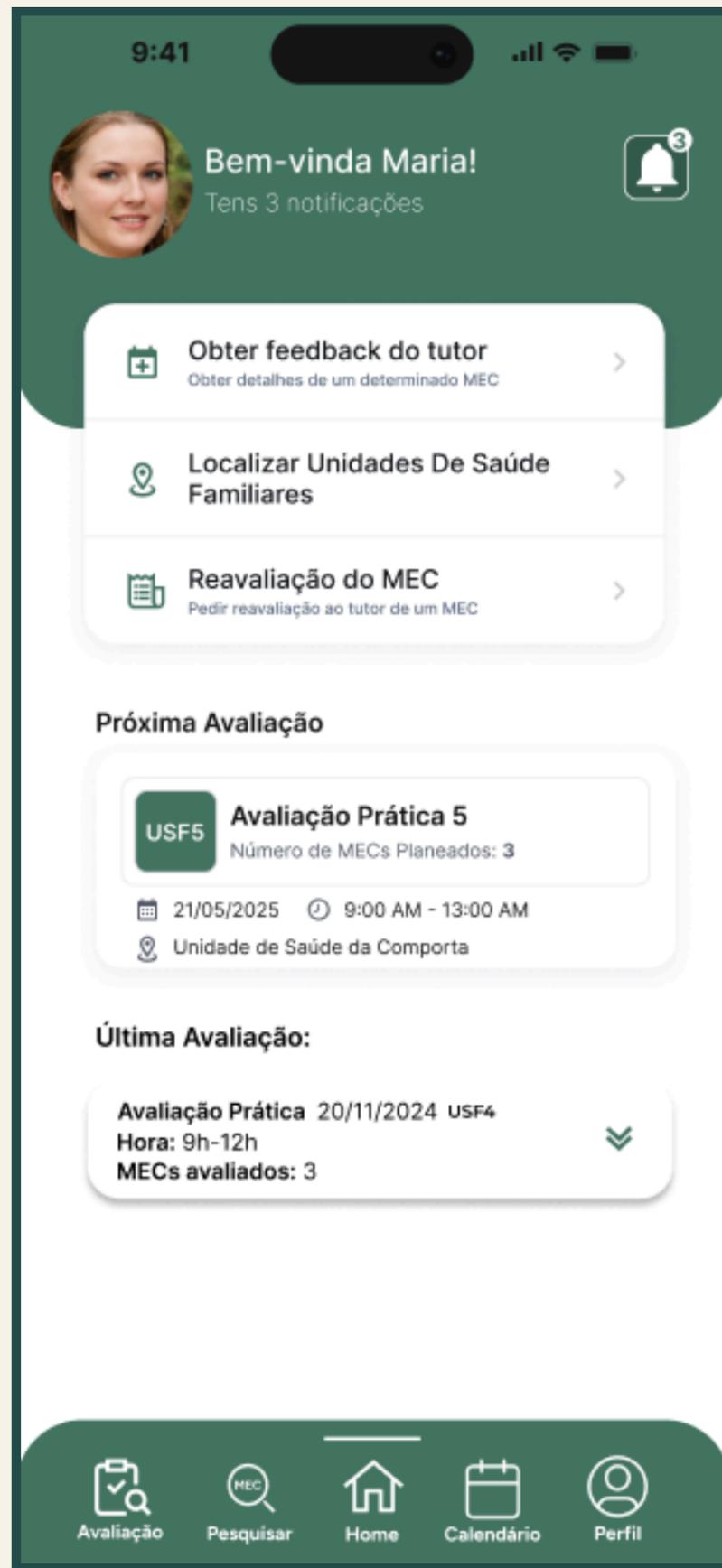
Administrator:

- Connect students to a tutor
- Overview of the feedback being given by tutors
- Download excel file with grades





LOW FIDELITY PROTOTYPE STUDENT

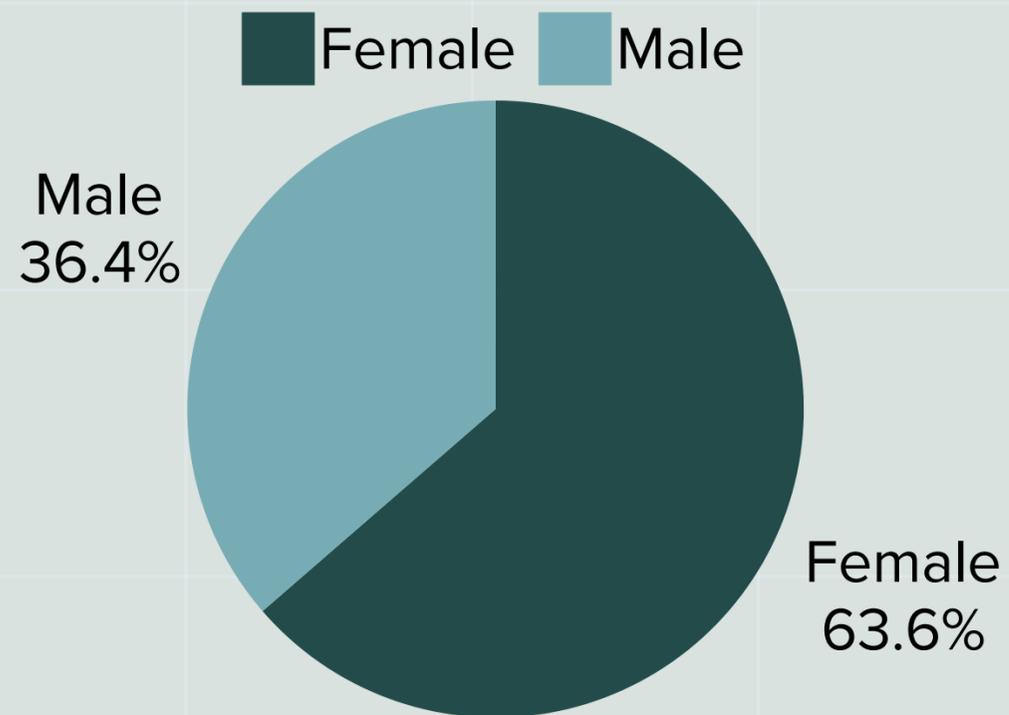




LOW FIDELITY PROTOTYPE TUTOR



LOW FIDELITY PROTOTYPE USER SAMPLE

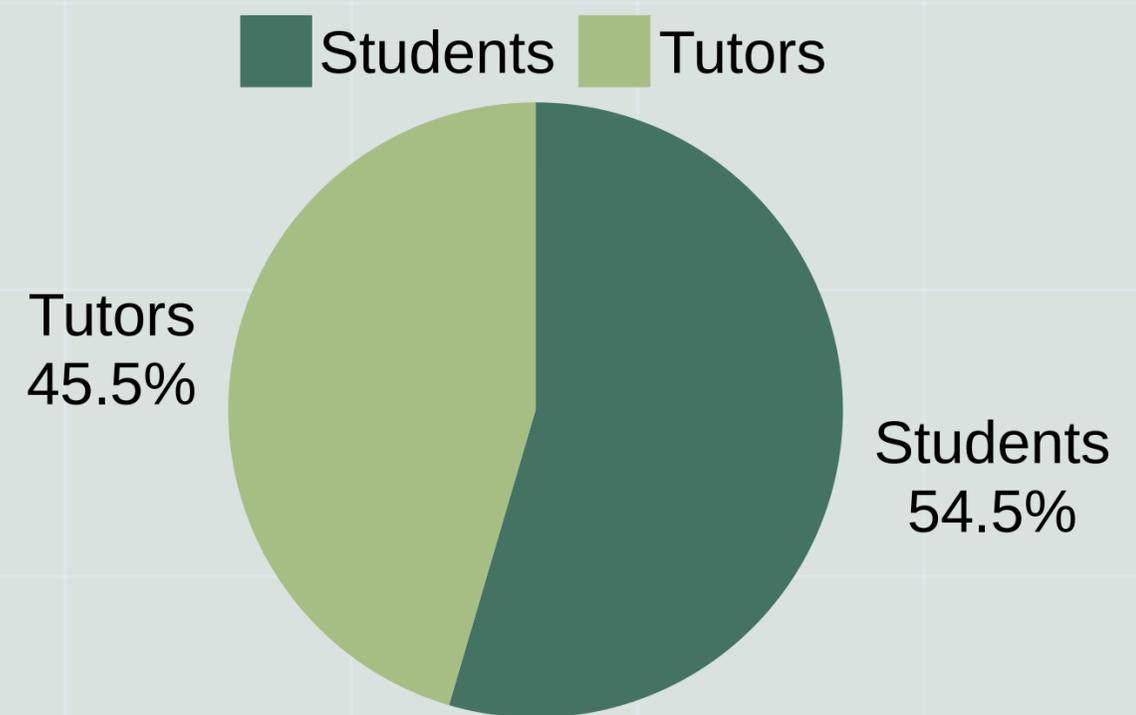


Number of users: 11

Male: 4

Female: 7

Age: between 17 and 41



Number of students: 6

Number of tutors: 5



LOW FIDELITY PROTOTYPE TASKS

Students

Task 1

Perform the self-assessment for the next evaluation (USF) with the following levels of autonomy:

- MEC14 - N1
- MEC15 - N3
- MEC16 - N3

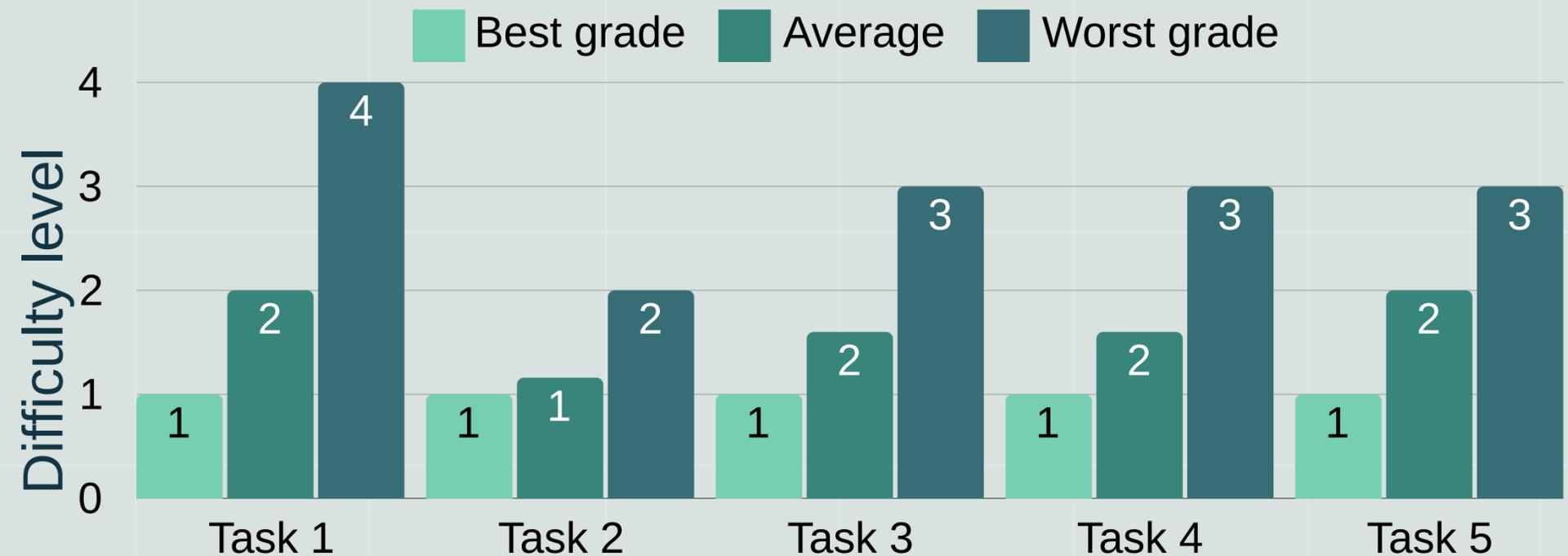
Task 2

Check the evaluation obtained in USF4.

Task 3

Check the number of approved MEC points.

ANALYSIS



Being 1 - Easiest; 5 - Most difficult

Task 4

Check the procedure for MEC 1.

Task 5

Request a reassessment of MEC 3.

LOW FIDELITY PROTOTYPE TASKS



Tutors

Task 1

Check when the next evaluation is.

Task 2

Perform the USF5 evaluation for Maria do Mar with the following levels of autonomy:

MEC14 - N1

MEC15 - N2

MEC16 - N2

Task 3

Check the calendar.

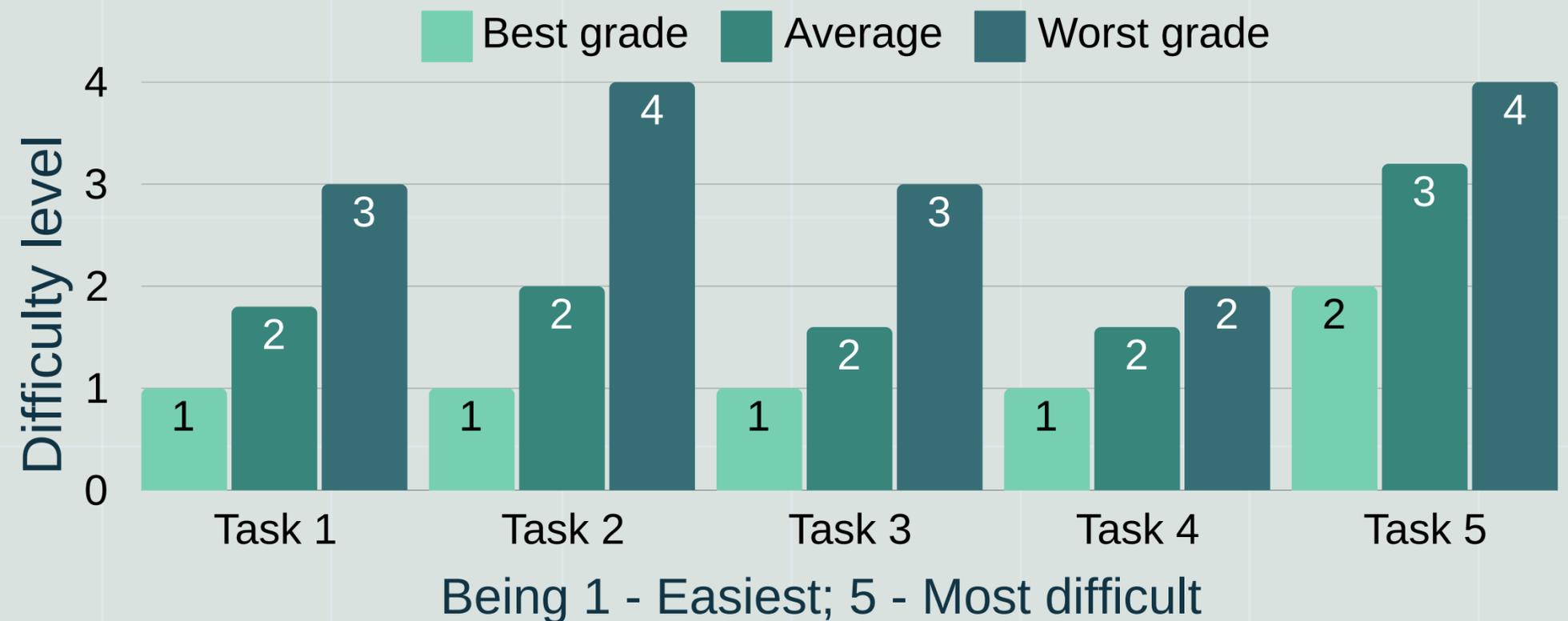
Task 4

Check the procedure for MEC 1.

Task 5

Accept the student's request to reassess MECs in the next USF.

ANALYSIS

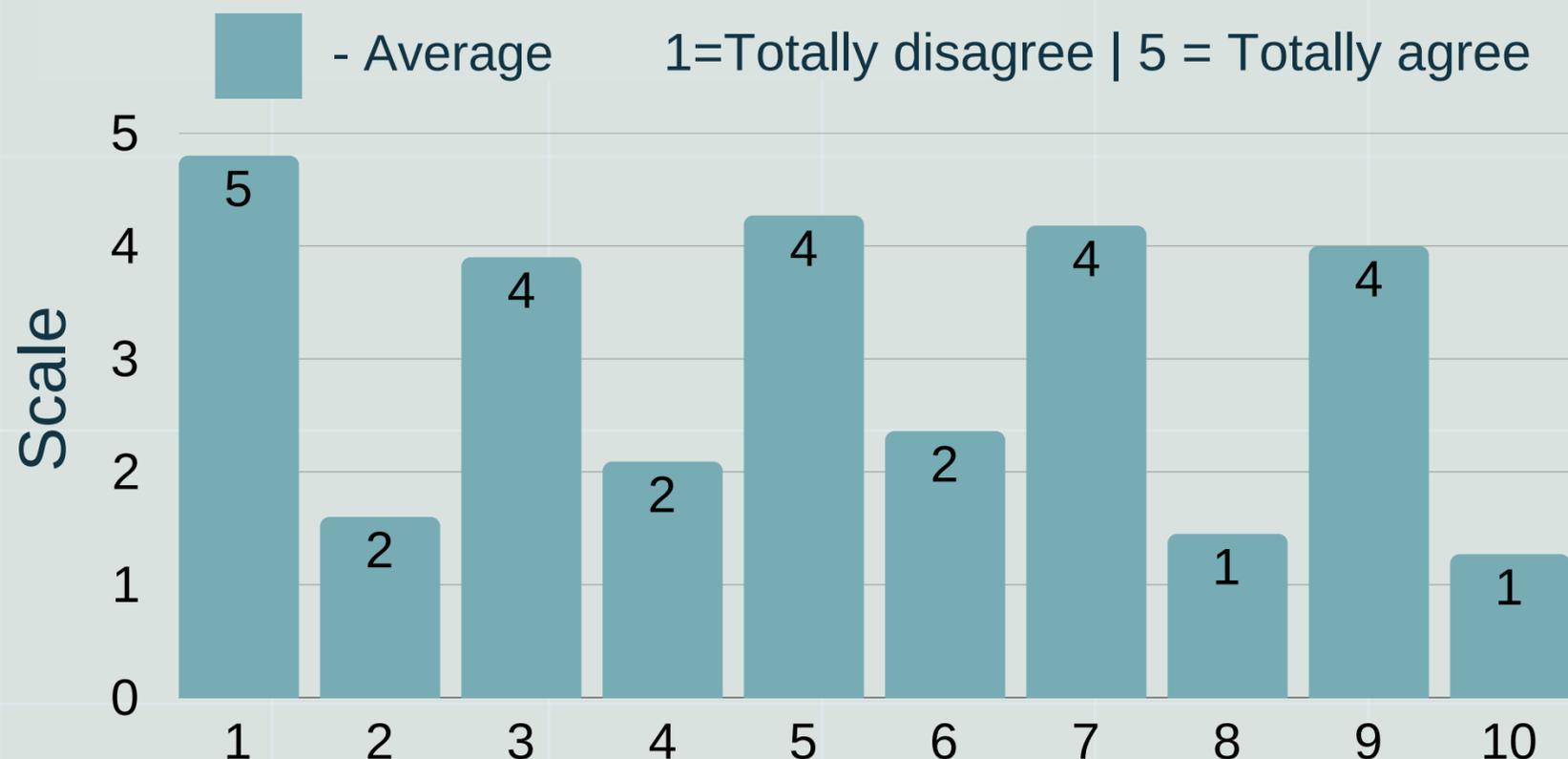


USER EVALUATION CONCLUSION



Overall Experience

- Users found the prototype intuitive, easy to use, and well-organized.
- Initial adaptation was quick, despite some feeling slightly overwhelmed at first.

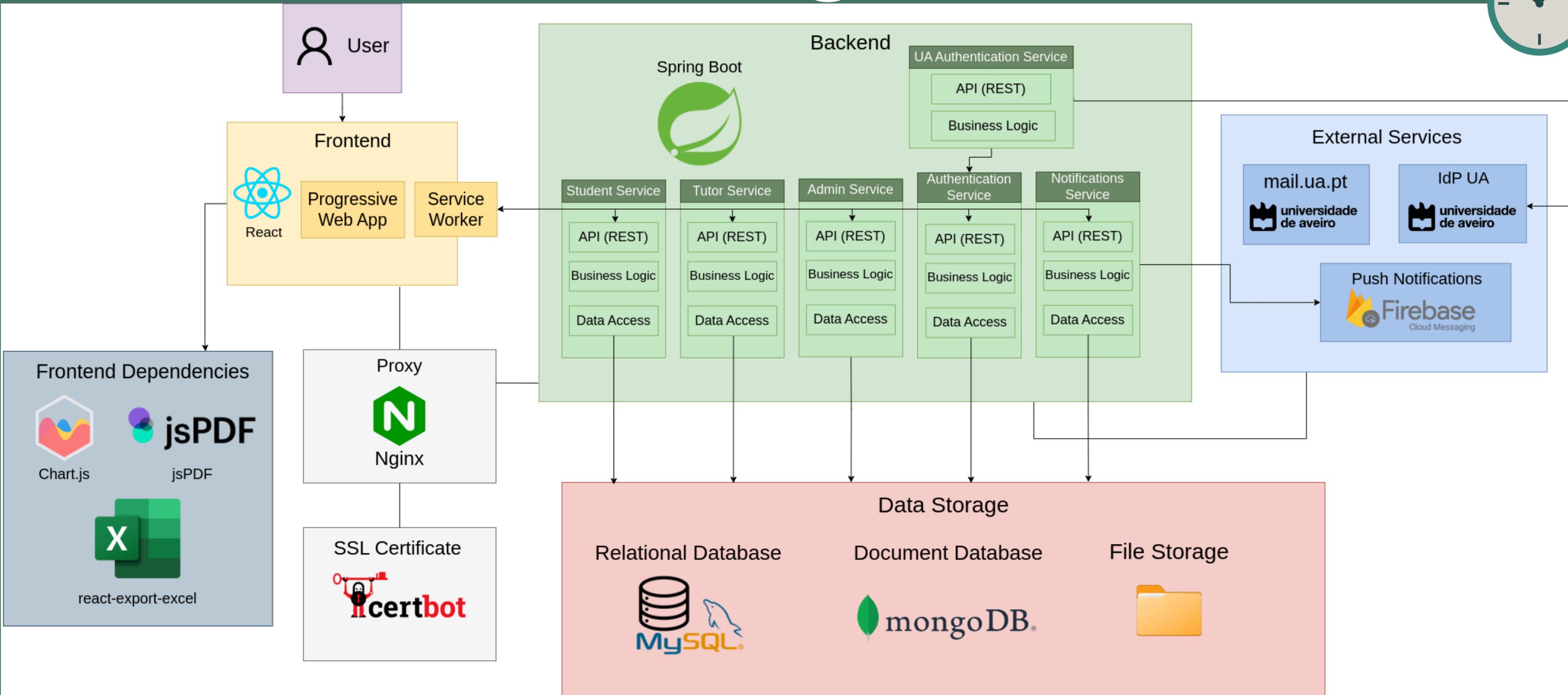


Average scores regarding the questions asked about the general opinion of the system

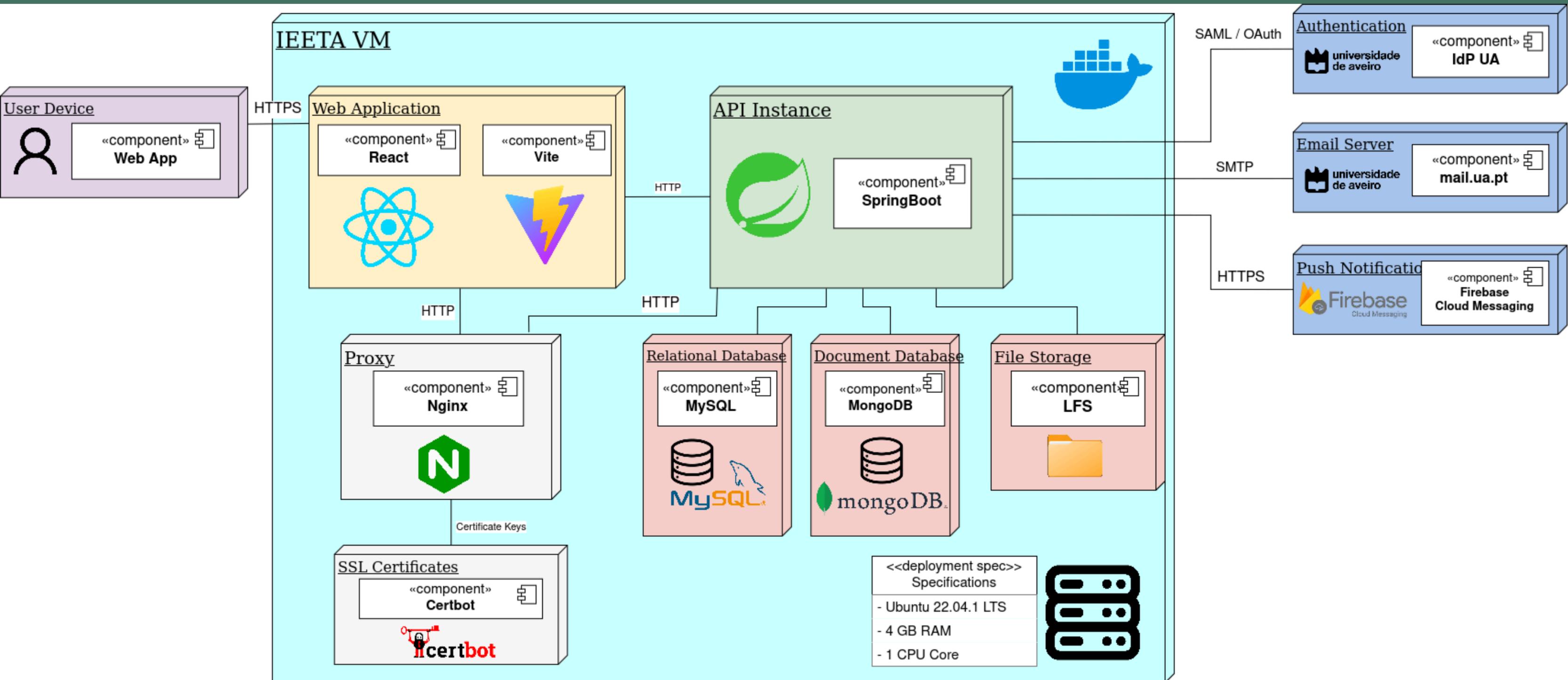
Odd columns: positive questions
Even columns: **negative questions**

Score range: 0 to 100 - > **Average SUS Score: 81**

Architecture Diagram



Deployment Diagram



RISKS



Authentication

Multi Factor Authentication



Offline Functionality

Email Notifications



Firestore Cloud Messaging

PACO API





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Thank you!

M2 - Elaboration Phase: Requirements Elicitation

Does anyone have any questions?

Follow the project updates on:
<https://github.com/bio-informatics/EPA>



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