

RNF:

Requirement specification	RNF-002
Requirement Name	Reliability
Description of the requirement	The system will have an interface that is easy to navigate, intuitive, and its functions can be used without complication.

Requirement specification	RNF-005
Requirement Name	Friendly and understable
Description of the requirement	The system will have elements that are easily recognizable to access the most important functions, making the system intuitive.

Test Planning

Participants:

Number of participants: The number of participants can vary, however, a minimum of 10 participants is required to obtain better results, as this will provide a variety of responses.

Recruitment of participants: The participants should be teachers of different ages, both young and over 50 years old, of any age but who are teachers.

Expected skills and knowledge: Participants should be familiar with technology and at least know how to use a mobile phone and a web browser. Likewise, these participants should know that ADHD exists and that students can have this condition.

Tasks:

- Register in the application using an email provided by the evaluators, then log in with the newly registered account.
- Create a student profile with information such as name, age, grade level, ADHD diagnosis, and any other relevant information.
- Register an activity carried out by the student in the application, including the date, the description of the activity, and its level of difficulty.
- Consult the information on ADHD and recommended strategies for managing it in the corresponding section of the application.

- Search and consult information about a specific activity in the application's resources section.
- Check the student's progress in the activities carried out in the application and make notes in the student progress record.
- Use the application's tools to create a customized activity for a specific student, including the activity description, difficulty level, and learning objectives.

Test Scenarios:

The usability test scenario for this web application will consist of a room with different devices and an internet connection. The use of the application should happen without complications and should go from creating an account to using each function and tool. Participants will be teachers from different educational levels, with experience in handling children with ADHD.

The objective of the test will be to evaluate the usability of the graphical interface and the ease of use of the application's tools. Participants must perform a series of specific tasks in the application, such as registering a student, adding activities, and tracking their progress.

During the test, participants will be asked to verbalize their thoughts while performing the assigned tasks. They will also be asked to complete a questionnaire at the end of the session to evaluate their overall experience and provide feedback on the application's usability.

The usability testing team will observe and record the participants' comments and actions while using the application. The test results will be used to improve the graphical interface and usability of the application, ensuring that it is intuitive and easy to use for any teacher working with children with ADHD.

Timings:

- Registration and login: 2-5min
- Create a student profile: 2-4min
- Register an activity carried out by the student: 3min
- Consult information about ADHD: <2min
- Search and consult information about a specific activity: 1min
- Check the student's progress: 1min
- Use the application's tools: 10min

Instruments, Tools, and Materials:

- A computer to manage the test and collect data.

- A screen recording software to capture the user's interaction with the application.
- Questionnaires or surveys to collect demographic and user experience information.
- Realistic task scenarios that allow the user to interact with the application and complete tasks.
- A comfortable and quiet test area for participants to take the test without distractions.
- A checklist to keep track of issues encountered during the test.
- A moderator or facilitator to guide participants and ask follow-up questions.

To ensure that the application is intuitive and easy to understand, it is important that the task scenarios are realistic and relevant to users. Additionally, it is important that the participants are representative of the application's target population, so you must ensure that an appropriate sample of teachers who work with children with ADHD is recruited.

Usability Metrics

Success rate: measures the number of times participants are able to correctly complete the tasks assigned in the application. Different scenarios that teachers could face in their day-to-day with children are presented, and it is evaluated whether they are able to use the application to record and track students' progress, consult relevant information about ADHD, and access the tools offered by the application.

Usability Levels:

Unacceptable: The participant is unable to complete any task

Acceptable: The participant completes the majority of the tasks

Excellent: The participant completes all the tasks

Time to complete: measures the time participants take to complete each task assigned in the application. If the application is intuitive and easy to use, it is likely that teachers can complete tasks quickly and efficiently. Therefore, if the time to complete the task is short, it would indicate good usability.

Usability Levels:

Unacceptable: The participant takes more than 1 hour to complete all tasks

Acceptable: The participant takes just over 30 minutes to complete the tasks

Excellent: The participant takes 20 minutes or less to complete the tasks

Error rate: measures the number of errors participants make when performing the tasks assigned in the application. If the graphical interface is intuitive and easy to understand, it is less likely that teachers will make mistakes when using the application. Therefore, a low error rate would be an indicator of good usability.

Usability Levels:

Unacceptable: Errors occur in all tasks

Acceptable: Errors occur in less than half of the tasks

Excellent: No errors exist

User satisfaction: measures the participants' opinion of the application and its graphical interface. Questionnaires or interviews are used to gather this information. Teachers are asked what they thought of the application, whether they found it easy to use, whether they found the information they found in it useful, etc.

Usability Levels:

Unacceptable: No participant is satisfied with the application

Acceptable: The majority of participants are satisfied with the application

Excellent: All participants are satisfied with the application

Abandonment rate: measures the number of times participants abandon the assigned task or the application in general. If the graphical interface is not intuitive or teachers find difficulties in using the application, it is more likely that they will abandon it before completing the tasks. Therefore, a low abandonment rate would indicate good usability.

Usability Levels:

Unacceptable: No participant completes the activities

Acceptable: The vast majority of participants complete all activities

Excellent: All participants complete all activities