Final Report

Agenda 2000X

1. Requirement Analysis

Nowadays internet and information is all around us are more easily accessible than ever. However frequently we find ourselves trapped in a loop of searching through multiple pages and applications to find the data we want, the data we really need.

Agenda2000X is an application that includes a schedule, a calendar, a to do list, an email inbox and a news and weather section. Agenda 2000X excels at gathering all the required information to plan a daily routine.

It was designed to run mainly run in Windows operating systems, however is prepared to withstand any ecran size. So it will be prepared to run in multiple platforms like a desktop, a phone or a tablet.

The target users of the Agenda2000X's application are mostly students, although a non-student person can use it for his/her daily routine.

The user will be able to plan his/her day. The student (user) will be able to consult and edit his schedule, he will be able to remember important upcoming events with the help of the calendar and can create a new event at any time. An Api will feed the app with the latest news and weather for today. The user can also keep track of important tasks with the to do list. Finally but not least the user can read or write emails.

To access the application, an account will be required to save all the user's data. To create the account, it will be required an email, a username and a password. If the user wishes to change any of the previous fields, it will be able to do it in the account window.

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2. Usability Goals

- Efficiency: the application must be efficient, so the user can use it to plan his/her daily routine;

- Learnability: the application must be easy to learn, since it will be used everyday;

- Practicability: the application must be easy and practical to use, so it can be used daily;

- Simplicity: the application must be simple, so the user can't lose while navigating in the application;

- Familiarity: the user must know what each symbol means, facilitating the navigation in the application;

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3. Paper prototype

During the test to the paper prototype, the users showed comfort while navigating, knowing where most of the information was and most of the displayed buttons' purposes.

In the course of the paper prototype test, users complained about:

- the confusion with the switch buttons on the top right of the "cards", which purpose was to flip between schedule and calendar or news and to do list;
- the lack of some options in the main menu;
- the lack of write email, see sent emails and bin options;
- the lack of edit the profile option;

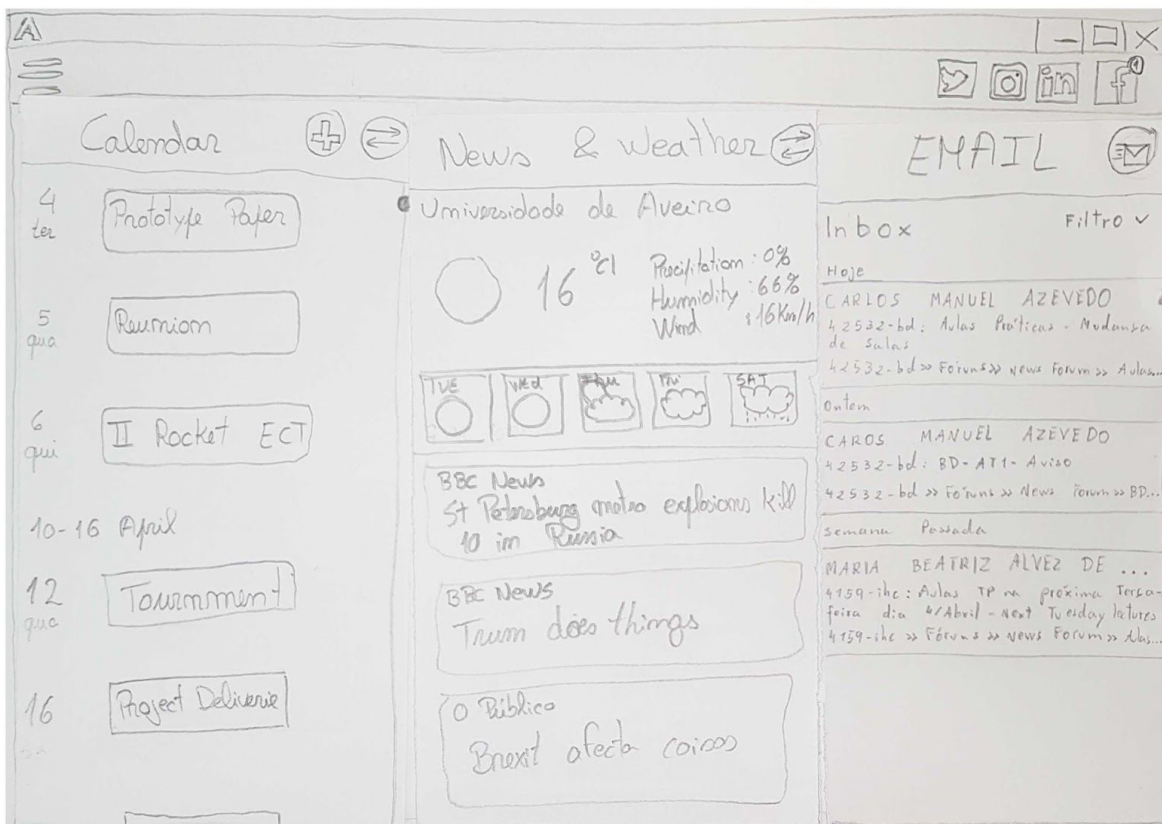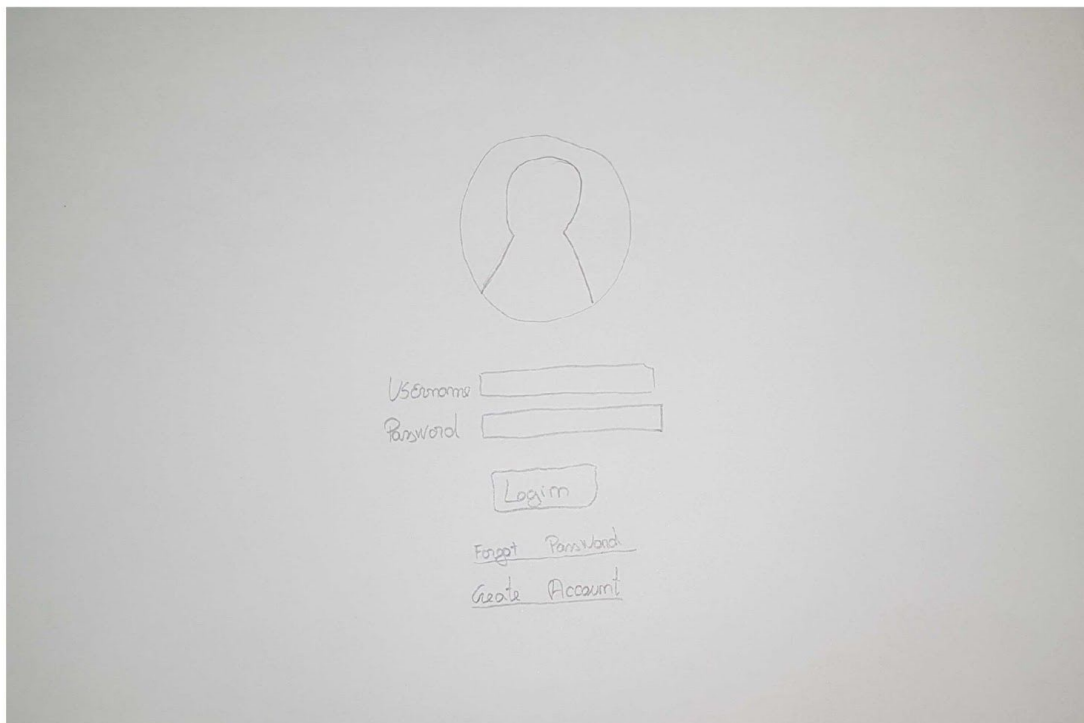All of them thought the prototype was useful and they liked the functionalities.

Although they liked, the paper prototype revealed some issues and shown us that the application needed some modifications to achieve its usability goals and a better performance.

3.1 Pictures of the paper prototype

PhotoScan by Google Photos

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universidade
de aveiro

Username
Password

Login

Forgot Password
Create Account

Calendar

4 ter — Prototype Paper
5 qua — Reuniom
6 qui — II Rocket ECT
10-16 April
12 qua — Tournment
16 — Project Deliverie

News & Weather

Universidade de Aveiro

16 °C   Precipitation : 0%
        Humidity : 66%
        Wind : 16 Km/h

TUE WED THU FRI SAT

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St Petersburg metro explosions kill 10 in Russia

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42532-bd » Fóruns » News Forum » Aulas...

Ontem
CAROS MANUEL AZEVEDO
42532-bd: BD-AT1- Aviso
42532-bd » Fóruns » News Forum » BD...

semana Passada
MARIA BEATRIZ ALVEZ DE ...
4159-ihc: Aulas TP na próxima Terça-feira dia 4/Abril - Next Tuesday lectures
4159-ihc » Fóruns » News Forum » Aulas...

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4. Important issues

The major issue with our application is the overall complication of the system. We proposed to accommodate many important features and unfortunately some of them were simplified or not implemented at all.

One of the issues we had was to address the problem users referred about the switch buttons that were responsible for turning the "cards", since it's very hard to find buttons that displays a turning of a "card" without confusing it with a switching position display between them.

In terms of coding the application, there was an important simplification made in the storage of created accounts. Since there was a lack of a database, it was made the decision of creating arrays to store the usernames, the passwords and the emails. The consequences are the erase of accounts after leaving the application and the need to create a new account every time the application starts (although we leave the option to login with a previous created demo account).

The synchronization between the application and the email will be ignored and an example of how it would like will be shown, since it requires a lot of time, which could be used in other important aspects of the application, has a very high complexity to implement the protocols of email sending and retrieving.

The option to change language, to edit Calendar settings, the To Do List settings, the Schedule settings and the email settings will not be implemented since they have a very high complexity and would require a lot of time and were not very important for this demo application.

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5. Usability Test

For the usability test, a total of 11 tasks were created and asked for the users to perform it, aiming to test the usability, the performance and the efficiency of the application. Some events were scripted, like adding an event to the calendar and a item to the to do list, this means no matter what the users inserted at the name or description fields, the event would show the scripted context, however none of the events affected the performance during the tests.

It was also created a questionnaire with a total of 13 questions about the performance and the efficiency of the application to be filled at the end of the test, where the users would display their thoughts and criticize the application and where it could be improved.

At the end of the test, the results show that the users find the application easy to navigate and simple to use, although there were suggested some modifications that could be performed to achieve a better performance and an easier navigation, like a more complete main menu, limit window minimum size, change the email card's text "Mail" to "Inbox", display the number of unread emails and simplify the access to the settings and logout options.

The users still complained about the card's toggle buttons, which replaced the switch buttons, and the separation of the settings and logout buttons from the main menu, although most of the applications have separate menus, one at the top left and other at the top right and after a little time exploring the application, the users associated the toggle buttons with the flip between the calendar and the to do list or between the news and the schedule.

The usage of Google Forms Allowed us to retrieve the information in the questionnaires as easy as it could be. Next we show some graphs generated by those forms.
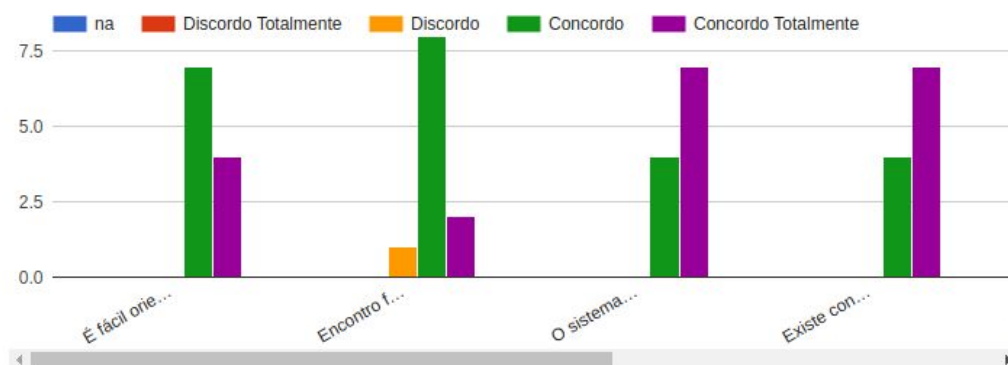
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5.1 Results from the usability test

É fácil de perceber o clima a fazer para o dia apresentado na aplicação?
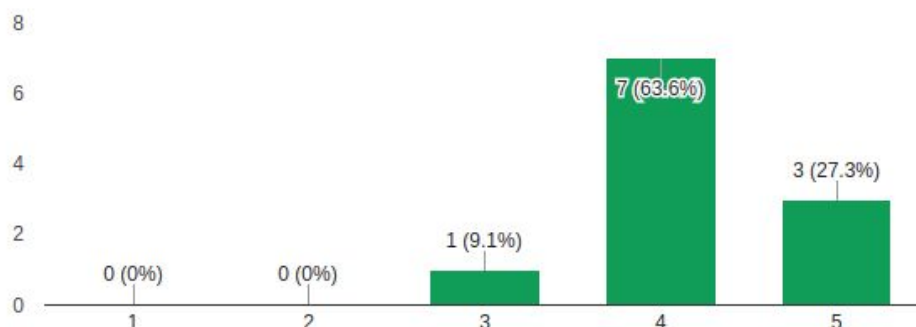
11 responses
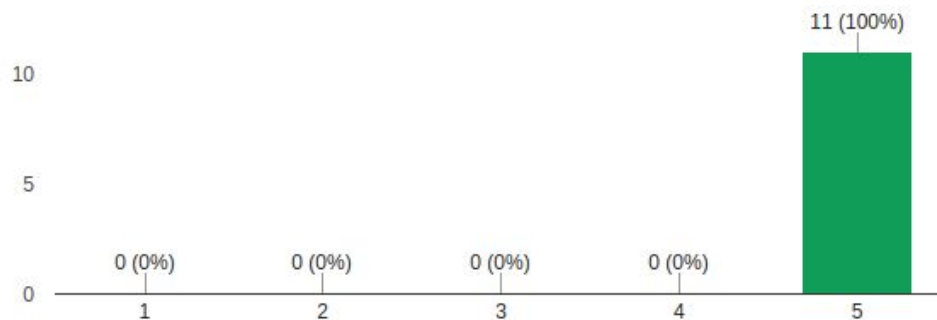
2.1. Opinião sobre a utilização do sistema

Tarefa 3 - Encontrar informação da conta a ser atualmente utilizada

11 responses

6. Final application

After the usability test, one of the first change to the application was the flipping of the cards. The calendar was changed to flip to the to do list and the news and weather section flips to the schedule, following the suggestions given by some users during the usability test and since the users could want to manage their events in the calendar with their schedules.

The menu with the settings and logout options were eliminated and it was implemented a button which leads to the profile window, where the user can access the settings, logout from the application and change its account's name, email and password.

It was inserted the settings button in the main menu, the scripted events were removed and now they display the inserted content by the user, it were inserted warnings in case of an empty username, email or password, an invalid password, username or email and the passwords not matching during the account's creation, the toggle buttons were replaced with buttons that represents better their purpose and their function, and the change the city option was implemented, which changes the news and the weather, to the ones from the chosen city, at the main window.

The weather and news are feeded by a live API, so you will get live information and working. It was also implemented a link to a news article by clicking in the new at the news and weather section, a clock and a date display at the top of the application, with the purpose of inform the user of what's happening in the world and the date and time.

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7. Conclusions

The Agenda2000X application is simple to navigate, so the simplicity goal was achieved. The difficulty of learning how it works is very low, so the learnability goal was also completed. The Agenda2000X also displays a good layout of information and showed to be very practical during the tests performed. That means the practicability goal was accomplished.

The application showed to be very efficient during the tests and showed a good performance, so the efficiency goal was also achieved. This means all of the usability goals were accomplished and the application fulfils the desired function, to inform the user of what's happening in the world and help him/her plan his/her daily routine .

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8. Annexes

1. Test usability's tasks

   https://docs.google.com/forms/d/e/1FAIpQLSdf-c7IQ93K28mHK23dqmBjnpdV3QGuGnASaR9yIFOhx9Bs-g/formResponse

   a. Responses

      https://docs.google.com/spreadsheets/d/1X2MPr5efMlLnBGHgSltR05dtXlnppAIwmXdZaH_sCLs/edit?usp=sharing

2. Test usability's questionnaire

   https://docs.google.com/forms/d/e/1FAIpQLScRtSWWsg6NVLJingdBmGusaELQ7Vg4AQrIFu90kE2IFDjnJg/formResponse

   a. Responses

      https://docs.google.com/spreadsheets/d/1oLE-KdQb15dO2JhWXk_TVzlRaOIqZv-u3_zKlkF2DDg/edit?usp=sharing

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