

Windows 10

Human-Computer Interaction

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Assignment 1

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About Windows 10 and why we chose it



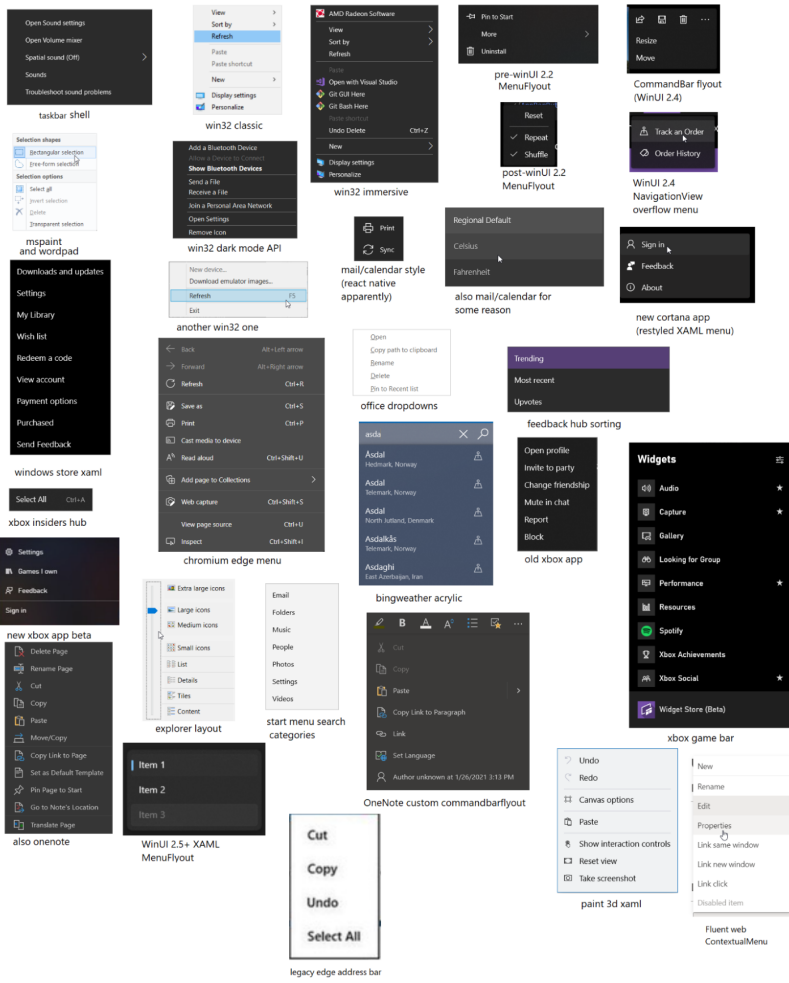
- Windows 10 is an operating system developed by Microsoft for personal computers.
- With around 70% market share worldwide (86% in Portugal), it's by far the most popular desktop OS.
- Widely used by every demographic in the developed world.

The process

- We used analytical methods to evaluate the usability of the system.
- To find problems with the system, we used the 10 Usability Heuristics for User Interface Design.
- To rate those problems and assign them a value, we used the Severity Ratings for Usability Problems.
- To perform cognitive walkthroughs, we used the Streamlined Cognitive Walkthrough.

Context Menu Hell

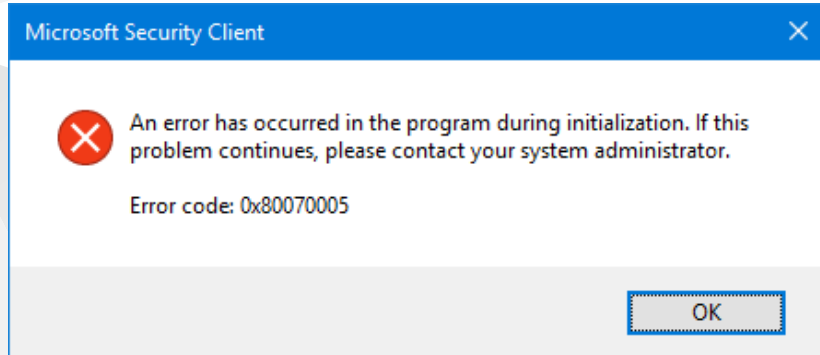
A lesson on how not to design user interfaces with Microsoft



Problem 1

- Description: The system and its native programs use different UI styles
- Heuristic: Consistency and Standards
- Median severity: 3

Problem 2



- Description: Error codes being used as diagnostic and so, the typical user cannot possibly know what it means
- Heuristic: Help users recognize, diagnose, and recover from errors
- Median severity: 3

Problem 3

- Description: Progress bar/percentage may appear stuck
- Heuristic: Visibility of system status
- Median severity: 2

Windows Update



Updates available

Last checked: Today, 1:10 AM

Security Intelligence Update for Windows Defender Antivirus - KB2267602 (Version 1.305.733.0)

Status: Downloading - 0%

2019-10 Cumulative Update for .NET Framework 3.5 and 4.8 for Windows 10 Version 1903 for x64 (KB4522741)

Status: Downloading - 0%

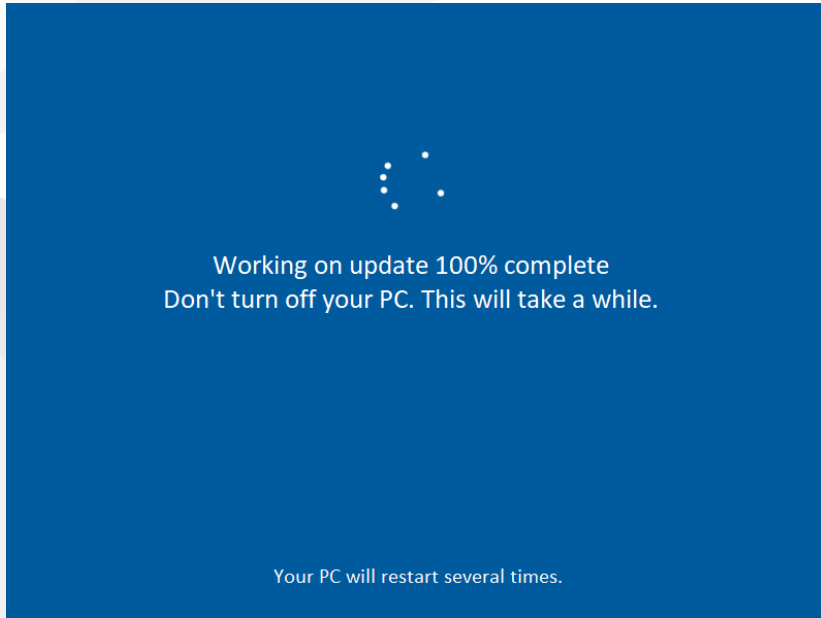
2019-10 Cumulative Update for .NET Framework 3.5 and 4.8 for Windows 10 Version 1903 for x64 (KB4524100)

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2019-09 Security Update for Adobe Flash Player for Windows 10 Version 1903 for x64-based Systems (KB4516115)

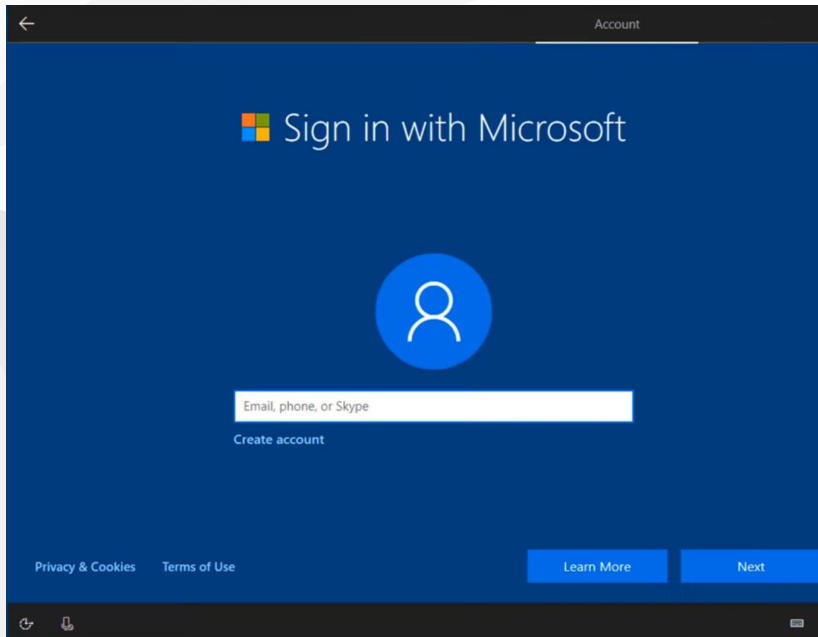
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Problem 4



- Description: Automatic Windows Updates
- Heuristic: User Control and Freedom
- Median severity: 3

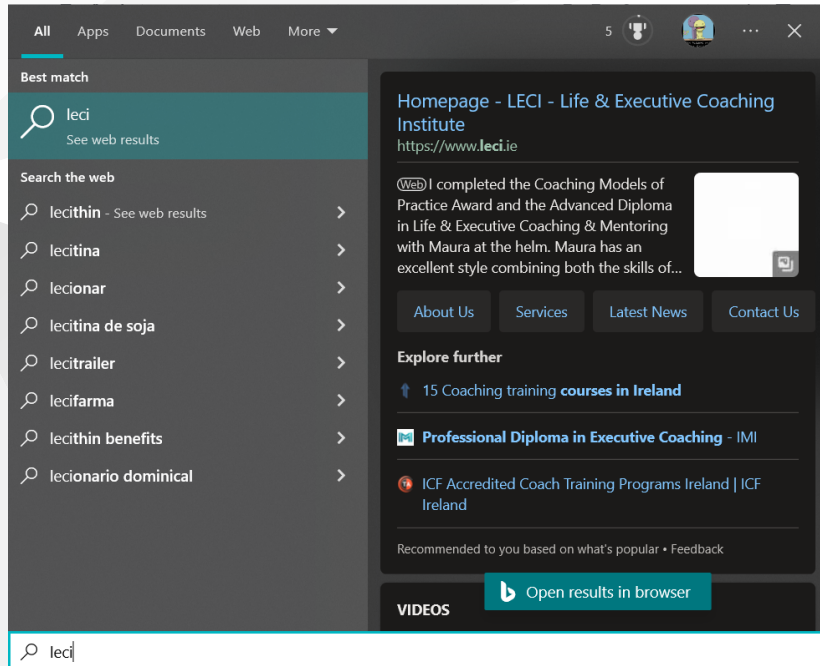
Problem 5



- Description: Forced to create or use Microsoft account when creating Windows
- Heuristic: User Control and Freedom
- Median severity: 4

Problem 6

- Description: Poor indexing in search bar
- Heuristic: Flexibility and efficiency of use
- Median severity: 2

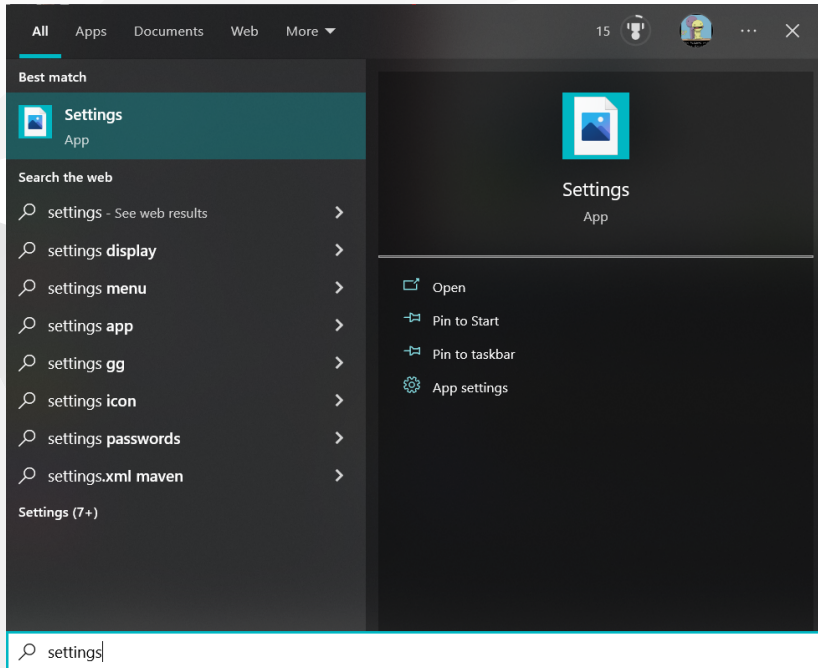


Severity Table

Heuristica	Problemas	A	D	M	Mediana
Consistency and Standards	The system and its native programs use different UI styles	3	3	2	3
	The Settings and the Control Panel are sometimes redundant, but not always, which is confusing	2	4	2	2
	Microsoft Store apps and standalone programs are not always interchangeable	0	2	2	2
Help users recognize, diagnose, and recover from errors	Error codes being used as diagnostic and so, the typical user cannot possibly know what it means	4	3	3	3
Visibility of system status	Progress bar/percentage may appear stuck	2	2	2	2
	It's not trivial to know if Cortana is open or not	1	2	2	2
User Control and Freedom	Automatic Windows Updates	2	4	3	3
	Forced to create or use Microsoft account when creating Windows	1	4	4	4
Flexibility and efficiency of use	Poor indexing in search bar	2	2	3	2
Aesthetic and minimal design	File explorer cluttered with a lot of buttons by default	1	3	2	2

Cognitive Walkthrough

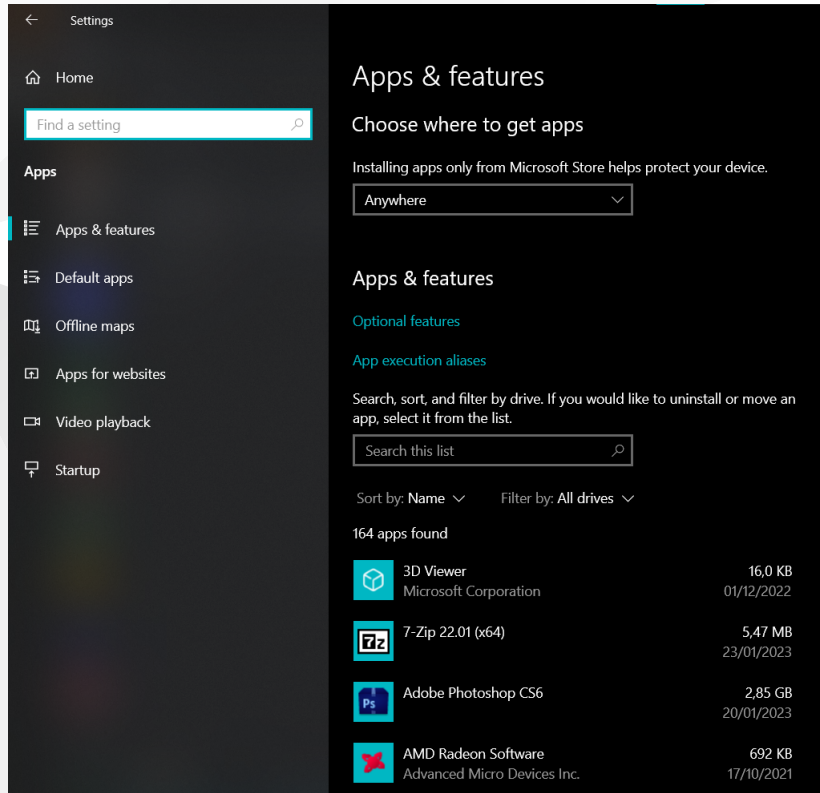
- With the Streamlined Cognitive Walkthrough method, we ask ourselves two questions after each step of the task:
 - Question 1: Will the user know what to do at this step?
 - Question 2: If the user does the right thing, will they know that they did the right thing, and are making progress towards their goal?
- Task: Change the default browser defined by the system
- Users: Any Windows 10 user who is not happy with the default app for the browser

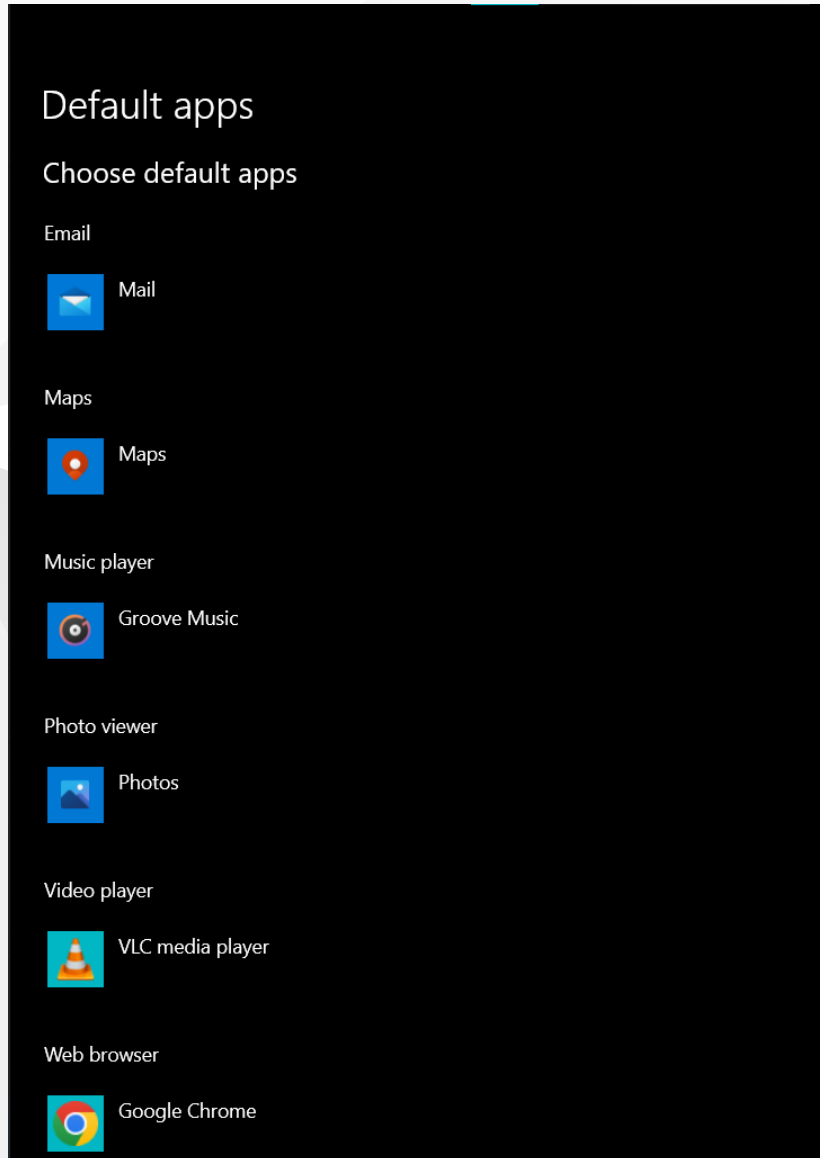


- Action 1 - click on "home menu"
 - Q1 → Yes
 - Q2 → Yes
- Action 2 - Either start searching for settings by typing or click the gear button on the left that opens the settings
 - Q1 → Yes
 - Q2 → Maybe
 - Issue → The user might not know that he can search by typing

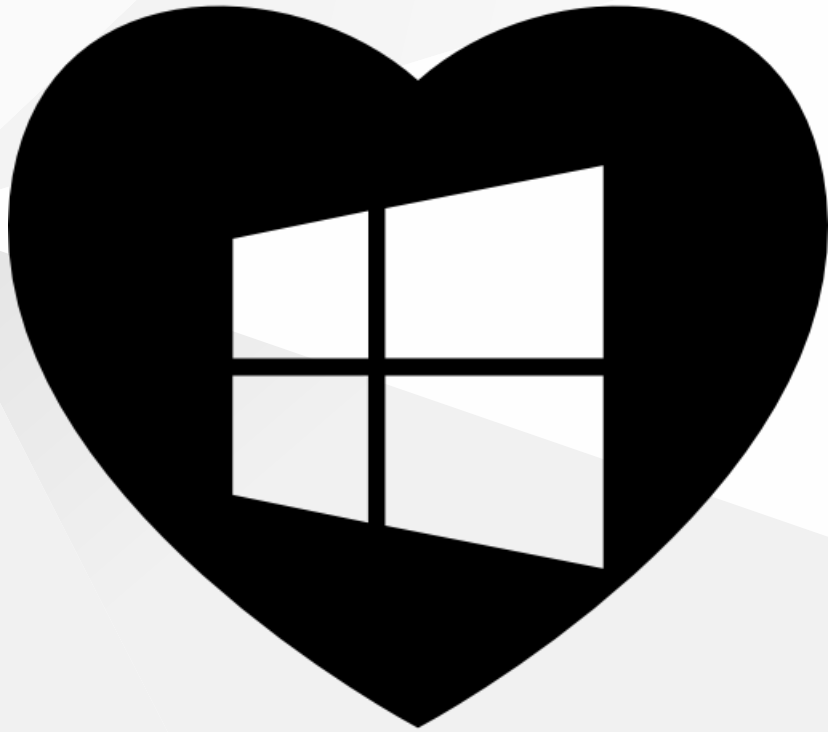
- Action 3 - Enter the "Applications" section

- Q1 → Yes
- Q2 → Yes





- Action 4 - Click "Default Applications"
 - Q1 → Yes
 - Q2 → Yes
- Action 5 - Under "Web Browser", click on the "Edge" or configured browser and switch to the other one.
 - Q1 → Maybe
 - Q2 → Yes



Appreciation

- Despite everything, it's still the most popular OS for a reason.
- It does follow the 10 Usability Heuristics more than it breaks them.
- However, a company of this size should be able to do better.