# Assessment A3 - The Computer

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In this part of the report we will explain some challenges that we have introduced to our application "Jobder", related to computer interaction. Even though some of the challenges could be seen as only one, we are going to explain them part by part to focus more in some details.

1. Speech to text

Technology that allows machines to translate human speech and convert it into text. It is a way of communication between people and computers, eliminating the need for keyboards or physical interfaces to interact with the system.
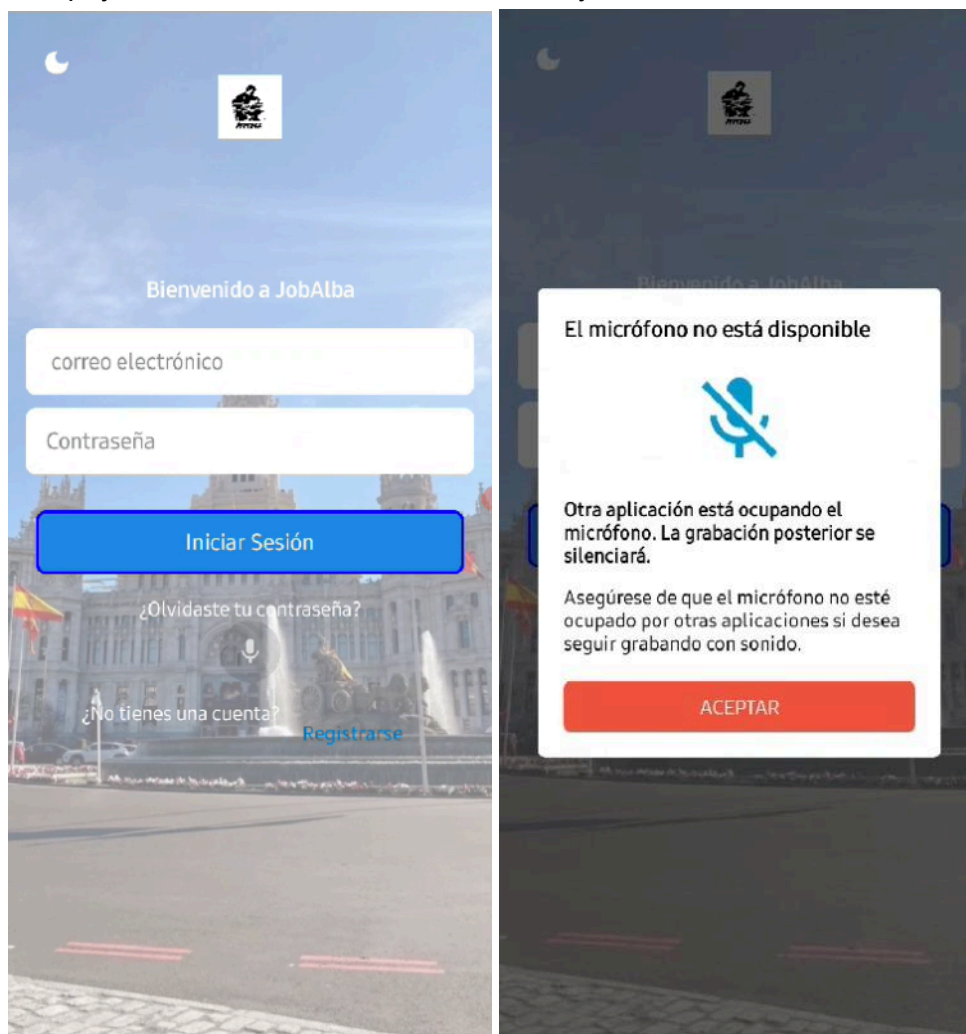
2. Text to speech

Same idea but opposite implementation. This technology converts written text into an audible voice. Its goal is to allow machines to communicate with people audibly, creating a more natural and inclusive experience in interaction. This characteristic is one of the most important for disabled people with visual problems. This implementation allows them to interact with the application knowing what is happening at the moment just by the screen reader.

3. Thumbs up

Following one of the main ideas of our project "Jobder" is the swipeable cards related to people/companies. For this challenge we are using Gesture Recognition using MediaPipe from Google. This technique uses landmarks that are implemented to recognize hand gestures with important marks in our hands (up to 21 points). The implementation in our application is whenever you are in the swipeable cards if you make the thumbs up gesture, it will be recognized as a like and it will swipe right (Like)

4. Thumbs down

Is the same idea as the previous challenge, but instead of detecting a thumbs up, it detects the thumbs down. This means that if you do not like the company nor the person that you are seeing for your company, you need to make a thumb down to swipe it left (Dislike). This implementation is so useful for elderly people that may not understand the usability of the application, since swiping can be a hard-working task.

5. Fingerprint authentication

As a security implementation for the project we decided to use fingerprint authentication since it is one of the most useful protections for our phones and applications. We also decided to get this type of protection since most of the people understand how the idea is implemented, with no necessity for extra knowledge.

6. NFC authentication

Our last implementation for security is NFC authentication. With this extra protection the usability of our application without the consent of the owner is almost impossible. One possible usage for the NFC could be the compatibility with new DNIs, where you can get the NFC of the document close to your phone and if it is the one by the owner of the phone, you will be logged into Jobder.

Aproxime una tarjeta
NFC para leerla

7. Christmas Bonus! 🎅❄️

As a bonus for this season of the year we have introduced some snowflakes to the application. Whenever you shake the phone some snowflakes will appear simulating that it is snowing inside the phone!