Heuristic Evaluation

Part I: Your Name

Simone Paniati - s301208

Part II: Project Description

A desktop application to interactively learn the Italian LIS. It is based on an image recognition system based on AI that, starting from the input images acquired from the computer webcam, tries to guess what sign the user is trying to mimic. The application is composed of several sections: a learning section where you can find the sign mimes and a practice section where you can practise on what you learned by completing different kind of exercises.

Part III: Evaluation Execution

The evaluation has been executed during the lab hours, in case it was necessary to ask some informations or clarifications to the other team. As a first task I carefully read the README document of the project in order to get familiar with the application objective and domain of interests. After this phase, before carefully reading the tasks, I gave a quick look at the main screens of the application in order to get familiar with the screens and the flows between them. When I was confident enough, I read the tasks and tried to perform them, writing down every violation I found in a list. I tried to perform the tasks many times in case I missed some details, and at every iteration I tried to “stress” the application in different ways in order to find also the problems that may not appear during the common usage of the application.

Part IV: List of Violations

1. **H1:** Visibility of system status
   Where: While doing an exercise
   What: If the user fills a form because something is not working, he doesn’t get confirmation that the complaint has been actually sent
   Severity: 2
2. **H7:** Flexibility and efficiency of use, **H4** Consistency and standards
   Where: During the learning o a new word or sign, in the “try yourself” phase
   What: after the user correctly spelled a word, the “return to the avatar” or “go back” button is not immediately visible because it is on the top of the screen. This is also not consistent with the “retry” button that appears if you make a mistake when spelling the word.
   Severity: 1
3. **H1:** Visibility of system status
   Where: In the “All types together” exercise type

What: When the user starts a new exercise, it's not immediately clear what is the kind of the proposed exercise
Why: the type of the exercise is on the top left of the screen and it's too small. It's an important information but it's not too evident
Severity: 1

4. **H4:** Consistency and standards
   Where: in the learning section, during the "try yourself" exercise
   What: When the user is trying to mimic a word/sign and he press the back arrow, the behaviour of the application is not consistent: in the words and topics section, it goes back to the list of words/topics. In the alphabet section, it goes back to the "choose a way to learn" page
   Why: the behaviour of the application is not consistent when performing the same action on different places
   Severity: 2
5. **H3:** User control and freedom
   Where: in the sidebar
   What: There isn't a button to go back to the homepage, except for the back arrow
   Why: in order to go back to the homepage, the user has to press the back arrow, which is not clear.
   Severity: 2
6. **H4:** Consistency and standards
   Where: in the extended sidebar
   What: the back arrow near the hamburger
   Why: It's not clear what's the behaviour of the back arrow, whether it collapses the sidebar or if it goes back to the previous screen. It should be removed
   Severity: 2
7. **H8:** Aesthetic and minimalistic design
   Where: In the "learn a new word" section
   What: The list of words
   Why: In a real application, the list of words could be really long and there is not a way to group together different words, for example by first letter
   Severity: 2
8. **H3:** User control and freedom
   Where: during an exercise
   What: The number of exercises in a session
   Why: you can't choose the number of exercise to carry out in a session
   Severity: 3

Part V: Summary and Recommendations

Report in the table below the total number of identified violations.

Heuristic	# violations
H1: Visibility of system status	2
H2: Match between system and the real world	0
H3: User control and freedom	2
H4: Consistency and standards	3
H5: Error prevention	0
H6: Recognition rather than recall	0
H7: Flexibility and efficiency of use	1
H8: Aesthetic and minimalist design	1
H9: Help users recognize, diagnose, and recover from errors	0
H10: Help and documentation	0
HN: Non-heuristic issue	0

I found that the prototybe has been built upon a very innovative and original idea, and I was really surprised about the result. In particular, given the limitations of the Figma platform, the team members managed to create a prototype that showcased a high level of dynamism and functionality, leaving little room for major issues to be identified.

However, while the prototype exhibited strong performance within its existing scope, I recommend to the other team to incorporate different types of exercises and learning activities into the application. By expanding the range of exercises available, users would benefit from a more comprehensive learning experience. This would not only enhance their understanding of the subject matter but also provide a variety of challenges to cater to different learning styles and preferences. By diversifying the types of exercises, the application could better accommodate a wider range of users and promote a more holistic learning environment.