**Translation of Karaton app to Czech - technical and IT support perspective**

There is no need to say that translating an app doesn’t mean just translation of the word database. That goes double for an app specialised in helping children to learn to read. Not to mention that the app was originally designed for a language from a completely different language family. Throughout the process we faced many challenges from many different aspects of the game which we could divide into two main categories – bugs that prevented a player to play the game smoothly and bugs that affected just a visual appearance. During almost a year of intense communication between the development team and the translation team we managed to get rid of most of the bugs from both categories.

**Problems preventing from playing**

One of the very first problem we experienced was incompatibility of the Czech version with some of the most widely used internet browsers – the most problematic appeared to be Safari. The trouble with Safari was quite unexpected as the development team stated that their intention was to make Karaton available on iOS and iPadOS as well. The solution, however, was quite simple – the development team recommended to use only Mozzila Firefox or Google Chrome. After some time, another problem with browser occurred. This time the solution was to delete the cache and re-install the software.

Another problem appeared to be with creating a character in the game after logging in. There were two possible ways how to do it – from the Karaton academy and from the game itself (just like in the Belgian version of the game. Unfortunately, the characters made within the game were not working properly. This functionality had to be removed and was never added since.

The game itself usually starts with an introduction video. This video showed the background story of the main characters in a brief manner. The translation team found this video as a positive element of the game and wanted to translate it, but in the end, it was removed.

After we managed to run the game using the right browser and creating a character, another problem appeared at the Tutorial Island – the very first destination of the game. In some cases, it was impossible to leave the island after successfully fulfilling all the conditions. After some time in the tutorial island a button to skip the tutorial appears, but it was not working either.

In my opinion one of the most important things in the game are the minigames. Whenever a minigame didn’t work basically the whole gaming experience was ruined. Probably the most problematic aspect of the game was (and still is) a minigame we usually call “ivy cutting”. This minigame is rather important not only for education purposes but also for the game itself (the ivy you get while playing the game is an important resource). Sometimes the audio didn’t work, sometimes the whole database failed to load so the game was practically empty. Every time the development team managed to repair it another thing broke. The last difficulty we had was caused by setting a challenge in the academy.

Concerning other minigames, they were not as problematic as the “ivy cutting”. We had some problems with “mining” where the game did not display any words (probably another problem with the database) and the same problem happened with “sawmill” as well. The mining game further did not display anything at all, or displayed an unclickable object, so the player was stuck in both cases. Games containing activities with spoken word from time to time did not play any sound and the mute button was not working either. There was also a problem with “wood cutting” – when we tried to play it displayed an error in Dutch.

The game contains a levelling system, where a player who achieve certain level gets the possibility to build new structures containing brand new games. It was problematic in the beginning, because in order to build this structure, a player needs to have a “blueprint”, and the games was giving this blueprint to player’s inventory instead of sending it straight to the workshop. It was then impossible to transfer these blueprints from the inventory to the workshop. Another problem connected to the levelling system we had to deal with was that our “in-game friend”, who rewards players when they level up with a box with surprise item, did not stack these boxes. So, if player did not open his/her box and kept playing – thus achieving another level, he/she had only one box anyways.

During the testing phase the game itself crashed completely only once, which I find very impressive. When a person tried to play Karaton, it displayed only grey screen. However, it was most probably caused by general outage of servers worldwide. Other than that, Karaton is very stable.

**Problems that did not prevent playing**

As I mentioned in the beginning, the game was originally developed to be available both on computers and tablets. However, the developers gave up on making the Czech version available on iOS and iPadOS. In my opinion having the possibility to play on either of these devices makes the game more accessible for wider variety of players (tablets are usually cheaper to buy then computers).

While playing Karaton, the game is constantly sending Newsletters about all kind of information (e.g. licence expiration). The problem is that the Newsletters are coming in Dutch. Even though we sent our translations the situation is still the same. This might seem like a marginal problem, but it feels very unprofessional if someone pays for a licence and is still getting spam-like messages. There was a time when we were receiving our translations of these messages, but the images attached had words in Dutch inside of them.

Another issue that is connected to this problem is the written form of documents including instruction sheet. In Karaton academy there is possibility of downloading all kinds of documents. However, these were not functional most of the time because the links did not contain any files. After the developers repaired this issue, the documents were outdated because the game was changing in time quite a lot. It is essential that at least the instruction sheet is up-to-date and fully translated so that people who are new to the game can read and learn something about it.

We also had some bug affecting only the graphic aspect of the game. For example, the borderline between the beach and the sea was in a strange way fluid and when the player was standing near the sea it looked like he/she was standing in the sea and was almost drowning. Another bug is almost funny. Quite often when the game is loading after playing a minigame, the characters is sliding back to the place where the minigame started. Even the translation itself has a graphic, or rather typo-graphic aspect. To make it more pleasing to the eye the text must be consistent (get rid of all inconsistences like capital letter and so on). I also must appreciate that the dev. team decided to give the font a little edge which made the text easier to read.

One of the last issues connected to graphics is the scrolling. I noticed that when I am scrolling up and down in the menu using the mouse-wheel, the overview of the character is moving as well. This issue is still ongoing, and the dev. team is still working on it.

Very specific problem occurred when we realised that the combination of the letters C and H make syllable CH. For some games focusing on spelling, it was necessary to deal with this problem, because it would lead the player in a wrong direction.

A separate chapter is the Karaton Academy – a webpage where the teacher can set up all the settings for his/her pupils or where parents can check the progress of their children. At first, we had some difficulties with setting a challenge for kids, because there was non-functional button to set up the challenge. After the developer team redefined this button, it was possible to specify the details of words and games that appear for the player. Also when choosing the specific words for spelling the page was not displaying all the possibilities – namely only 2 pages out of approximately 15 possible. While testing children at school we were continuously checking their progress in Karaton Academy. The system is very well designated to identify the problematic aspects of the child’s skills. It is also possible to get the results in excel spreadsheet for further work. Unfortunately, sometimes the system was not showing the progress even though the child played. Apparently, it had something to do with challenges. Even the excel spreadsheets were not loading but the development team managed to repair the academy.

A chapter by itself is also around the situation caused by national lockdown in Czechia. If we wanted to continue testing the game with children from home, we had to give licences and instructions to their parents. The first important thing was the licence. Unfortunately, people are very impatient and some of the parents tried to play the game before the dev. team managed to give them licences. They somehow invented a strange way how to break into the game without the licence and spread instructions how to do it among other parents. It was then very demanding and time-consuming to convince the parents not to use the bug and log in properly. It took about two weeks and hundreds of emails to achieve at least some kind of coordination. The fact that half-finished game was tested by almost 20 people at the same time (we were not ready for this) brought many unexpected bugs and issues. In the end, we managed to get rid of most of the problems but at the same time we realised how important it is to have bugless game if we want to ever distribute it to public.