Curious Learning - Feed the Monster (FtM) Localization Process and Pipeline

Purpose/ Objective

Considerations for translating reading app

It is important to note that we are actually not asking volunteers to translate FtM from English into another language. That would not work for many reasons. Written languages differ tremendously in their complexity and our goal is to create a tool that allows children to understand how the written language works. So instead of translating, our volunteers help us adapt the app to their native language.

Process Diagram

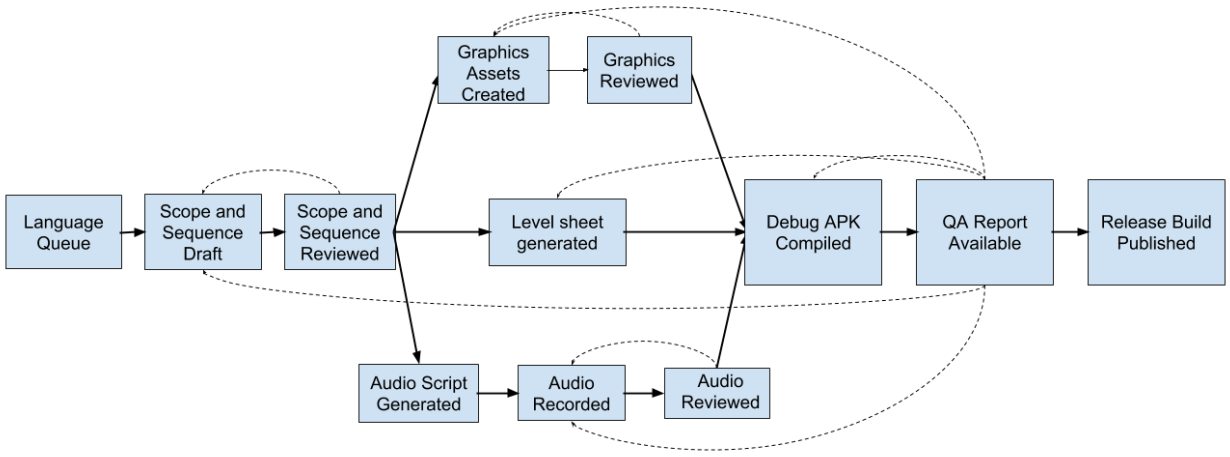

Fig 1. Process Diagram for the Feed the Monster localization pipeline. Solid lines indicate the flow of production, while dotted lines indicate revision loops where assets are changed or mistakes corrected.

Pipeline

Generating the Educational Content

When beginning work on a target language, our first step was to contract with a native speaker who has experience as an early childhood educator to develop a Scope and Sequence for that version of the game. Feed the Monster was originally instrumented with 6 letter groups across the 77 levels, so we asked the educators to group the language's letters into 6 groups according to the order in which they are learned. Then the educators would provide examples of short, easy to learn words for each level that a 4 year old child would reasonably know. If the language has a high percentage of long words (e.g: Zulu), we began by identifying approximately 40 high-frequency syllables and using those as substitutes for words in the earlier letter groups. Any words introduced later in the game would be based off those syllables so children could use them as a stepping stone for learning to read quickly and fluently decode the words. We also asked them to translate the list of words and phrases that we needed to localize the UI, including text graphics and feedback audio. After the Scope and Sequence was created, we would contract another native speaker to review the document and identify errors or suggest changes. Once the document had undergone a review and revision, it was ready to send down the asset production pipeline. Please see the Appendix for these Scope and Sequence documents.

Asset Production

Our asset production pipeline was relatively simple thanks to the previously discussed design and implementation decisions made during feed the monster's development. The only visual assets we required consisted of a handful of PNGs of stylized text and game tiles for the app's memory minigame. The rest of the assets were letter sounds, words, and phrases that required audio recordings. Our pipeline consisted of two asynchronous, simultaneous process through which we produced the graphic and audio assets. Once a Scope and Sequence document was completed, it was sent to a team of artists who produced the visual assets using the text translations in the document. Meanwhile, we contracted with native speakers of the target language to serve as voice actors. Using a Google Apps Script, we parsed the Scope and Sequence document into a script for the actor, with a corresponding list of files and their contents to aid them in splitting the audio to serve our needs. Another native speaker (usually independent from any others previously contracted) would review the recorded audio for missing assets, missed translation errors, or mispronunciations.

Scope and Sequence Blank