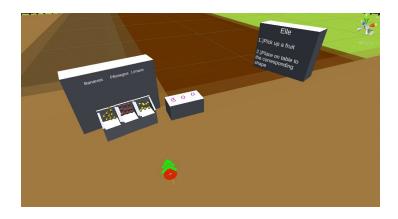
## Prototype 1 Milestone Report

The purpose of this prototype is to implement a potential game scenario, in hopes of providing an experience that teaches the player language terminology via observation and experimentation. While our mechanics had radically changed during this phase, our goals and ambitions haven't.

We intended to learn about means for the player, other than speaking, that hone natural learning skills that isn't cumbersome or faulty. The experience we are developing puts the player in the forefront of different scenarios that bring about new facets of the language learning process. Can direct interaction and immersive environments be enough to solidify concepts or vocabulary into the player, without feeling like glorified flash cards?

Two design questions the prototype addresses are 1) can we implement voice control?, and 2) Can we create scenarios in which the learning behavior is inherent to the actions related, without speaking? Speak Your Mind was geared for full voice recognition technology, requiring every action to utilize speech commands. After searching for solutions, we decided to scrap this, due to the unfavorable reliability of the technology itself, as well as our inexperience in the targeted foreign languages. Thankfully, this did not mean our overall game concept was moot, it just meant our goals had to be realigned.



We went through several different ideas on what scenarios would be best suited for a test. We had several already written, involving set on sailboats, hospitals and bus rides as possible learning scenarios. Decidedly, we went with a supermarket scenario as we constantly came back to it when talking about the concept. The player uses a grocery list in Portuguese and must figure out the correct fruits to get. This prototype keeps our original idea of having players practice Portuguese while leaving out all instances of voice implementation.



Fruit Selection



Grocery list



Fruits Placed

## The Language Learning Problem

Language learning is notoriously difficult, but so beneficial and important. Many people will pour their money, time, and effort into learning a new language but struggle to reach a level of proficiency that allows them to enjoy a simple conversation. There always seems to be an obstacle between learning vocabulary and using sentences that leaves even students who have studied a language for a long period of time struggle to say "Can I have a glass of water?"

## **Our Project**

Speak Your Mind is a VR language learning experience that is designed to engage the player in scenarios that make learning more impactful and meaningful. The hope is that by having the player completing challenges with the language, their connection to using the language becomes stronger than if they were just memorizing key phrases. When they are introduced to new concepts, it will either be in the context of something they would already understand, or in a situation where they will be applying the new terms immediately, and surrounded by examples. Speak Your Mind wants to take full advantage of VR's immersive capabilities to virtually submerge a player within the language being used, in addition to keeping the place a fun and comfortable place to practice, without the pressures that come with speaking with more advanced or native speakers.

## Scenarios

Speak Your Mind is structured around Scenarios, each one focuses on a set of vocabulary and terms, based on themes or relevance. The player 'enters' the Scenarios and plays them relatively independent of each other, none directly leads to another, or follows, they're contained. All scenarios are available from the very beginning. Each scenario, when selected, gives a brief overview of the content the user can expect, as well as a time estimate and difficulty range.

An example of a Scenario would be as follows:

At the supermarket, at the produce section, the player as a grocery list of fruits from their mother. It reads "1 banana, 3 laranjas, 4 maçãs, 1 pessego,". The player may understand 'banana' on the list, and nothing else, but can surmise that the others are fruit. The inuiting the meaning of the words, while getting real time feedback of if they're correct or not by the game,

will create a stronger association for the player and more easily cement the vocabulary. When the player has successfully gotten each fruit, the scenario is complete.

Three scenarios will be available in total. Each will provide a different setting, goal, and learned concept of Portuguese, be it vocabulary, pronunciation, or grammar. The style will be minimalist and functional, keeping models low-poly with flat colored textures.