

STUTTER

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UAL: MA Virtual Reality
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Overview

Theme / Setting / Genre

Theme: Abstract interpretation of the human mind

Setting: The Human Mind (Stutterer - Fictional Interpretation)

Genre: Abstract Puzzle/Art Experience

Core Gameplay Mechanics Brief

GM #1: Grab and place

- Player presses left and right triggers to grab words floating around the environment and when they place the Object on a correct word pad it will snap in place.

GM #2: Movement

- Player uses the left joystick to move around the environment and the right joystick to rotate their field of view around the environment.

Targeted platforms

- Oculus Rift S (Tethered Headset) - Primary Platform Target
- Oculus Quest 2 (Wireless Headset)
- HTC Vive (Tethered Headset)

Influences (Brief)

Stutter (2015 Short Drama film written and direct by Benjamin Cleary)

- The plot of this short follows the everyday life of a lonely typographer with a severe stutter but the interesting concept behind this film is while it shows us how he speaks with his impediment in many different situations we can also hear the characters mind speak fluently telling the audience what he wants to say but can't. This short is a massive influence on this experience because the idea of creating an experience that almost shows visually and physically what is happening in the characters mind was very fascinating and the overlapping of voices and sentences in the characters mind was a direct inspiration for the narrative for this VR experience.

Psychonauts (2001 Video Game)

- Psychonauts is an amazing video game experience where nearly every level, world and environment taking place inside the human mind of multiple individuals and each one is so unique and varied depending on that character. This video game is inspiring how one person can interpret and create a unique and varied mind just from one character so I wanted to use this concept in my own experience by creating what I felt my mind would look like in the terms of section or area that deals with speaking in my head.

A Tale of Three Brothers (2011 Short Animation Sequence)

- The look and feel for this short film were something that had always stuck with me because it is a short sequence of the characters reading a story from a book and how that would be visualized on screen. This experience is of course very typographic and about language and speaking so the visual look and feel of this short was carried across in this concept

Personal Experience

- I have personally had a 'Stutter' my whole life and have had speech therapy over time and of course have experience different severities and situations in which my speech impediment has been better or worse. My person experience with a speech impediment and my own input and interpretation has a large overall influence on the full experience to how I want the mind to be designed and the severity of social conversations.

The elevator Pitch

A Virtual Reality Game which allows the player to embody the mind of a 'Stutterer' allowing them to experience the difficulty of creating and processing words while also hearing their thoughts in different levels of social situations through a video game experience.

Project Description (Brief):

A stutter is a rather uncommon and misunderstood speech impediment that can have a lot of stigma and can create difficult social situations. There are many different factors and background to speech impediments which can create a different and unique experience in Virtual reality to both create a game and possibly create more awareness or education for speech impediments. Stutters find it difficult in many different social situations to sometimes speak make, make sounds or even communicate because the words can be lost or messed around within the mind and what if this could physically be shown to someone in VR.

An abstract interpretation of the mind of a stutterer can be created showing words moving and floating around the environment moving at different speeds and rotations to show the chaos of speaking for their minds. Through virtual reality a player can experience an interpretation of the physical hardship trying to create sentences representing the mental hard ship for those with speech impediments. This will create an education gaming experience that will be both challenging and hopefully mentally stimulating to players of the experience.

Project Description (Detailed)

Speech impediments are prevalent in millions of people around the world, and it is estimated that stammering affects around 1 in 100 adults with men being around 3 to 4 times more likely to stammer than women. So stuttering affects quite a small amount of the overall population and there is a somewhat stigma or misunderstanding with those who can't speak to 'socially acceptable' level as those around them and this is often due to a lack of knowledge with speech impediments or unawareness of what to do in those situations. Stuttering is when you repeat sounds or syllables such as saying "ta-ta-ta-table", making sounds longer such as "ttttaaaable" or a word gets stuck or does not come out at all. The severity of a Stutter can vary from person to person and can entirely depend on the situation of a conversation or environment with times when a person can speak relatively fluently but also periods of extreme stuttering or being left literally speechless.

All these different factors and background behind speech impediments for a stutter have the ability to create a unique, interesting and somewhat educational experience within Virtual Reality. While it isn't possible to replicate a speech impediment directly using spoken word for a player we can create an alternative experience where the player has to physically use their body to create sentences and show different levels of difficulty or severity in the process. Virtual Reality video games allow you to use your full body in gameplay so this gives a great opportunity for players to use their body to simulate something that they wouldn't normally expect.

From a personal interpretation, the main concept for a Stutter is how sometimes it is difficult to speak whether that is finding the correct words or how words can be misplaced or how to find in a normal amount of time while having a conversation. For this experience the player will stand inside the mind of stutterer, to simultaneously embody someone with a speech impediment and to also act as the driving force to create a conversation. Within the environment the player will see words floating around them that they will need to physically grab and place onto a table in front of them to create a

sentence that the mind wants to say to the person they are having a conversation with. This create an opportunity to show different severities of stuttering by showing how someone can be very frustrated with themselves and showing the anger or annoyance within the mind of not being able to say some somewhat simple sentences. The conversations that the player will experience will also be simple for this experience but show different levels of social interactions from simply asking how someone is to asking a deeper personal question to the player which commonly would result in the someone's stutter being more prevalent.

What sets this project apart?

I feel that in some ways this project or experience is quite unique as an overall concept. We have of course seen multiple iterations and experience based on serious topics such as mental health, therapeutic experience and those which create designs of the human mind and experience of through and memories. However, I wanted to attempt to create something different by not only finding a way to show the difficulty of dealing with a stutter in a physical way but to also create a gaming experience out of the whole world and something that will hopefully be memorable and replaceable for the user.

While the general topic, story and theme of the experience may seem quite serious in nature I'm hoping that the chaotic nature, urgency and speed of the whole game creates a sense of challenge and possible even fun within the full experience. The disclaimers at the start and end of the experience will provide the information and reason behind the whole game while the gameplay and levels will hopefully feel like a separate entity up to interpretation by each player.

Core Gameplay Mechanics (Detailed)

Game mechanics determine how the player interacts, the level of complexity, and even how easy or difficult the experience is.

Novice Difficulty (Tutorial)

- The first area of the experience acts as a tutorial which doesn't pressure the player to do anything and gives them time to absorb environment, get used to the controls, gameplay and prepare themselves before they start the full experience. The player will see the word 'Hello' floating around them within the environment and they will need to grab that word and place it on the table Infront of them in order to start the easy difficulty of the experience. Once the word is place it will snap to the table and the whole environment will fade into black

Easy Difficulty

- The easy difficulty is the first level of the experience in which the player will see eight separate words floating around the environment at a slow speed. These words include 'Hello', 'Very', 'Good', 'Thank', 'you', 'How', 'Are', 'You', 'Alright' and the player will need to create the three-word sentence 'Very Good Thank you' to complete this level of the experience.

Medium Difficulty

- The medium difficulty is the second level of the experience in which the player will see twelve separate words floating around the environment at a moderate speed. These words include 'Hello', 'Very', 'Good', 'Thank', 'you', 'How', 'Are', 'You', 'Alright', 'Stressful', 'But', 'Pushing', 'Through' and the player will need to create the four-word sentence 'Stressful but Pushing Through' to complete this level of the experience.

Hard Difficulty

- The hard difficulty is the third level of the experience in which the player will see twenty-four separate words floating around the environment at a high speed. These words include 'Hello', 'Very', 'Good', 'Thank you', 'How', 'Are', 'You', 'Alright', 'Stressful', 'But', 'Pushing', 'Through', 'Well', 'Unfortunately', 'We', 'Broke', 'Up', 'Because', 'Why', 'Please', 'Don't', 'Goodbye', 'However', 'Okay' and the player will need to create the six-word sentence 'Well, Unfortunately we broke up because' to complete this level of the experience.

Story and Gameplay

Story (Brief)

A person with a speech impediment having a short conversation with another individual with the questions being asked over time becoming much more personal and difficult to answer leading to the character's stutter becoming more severe over time.

Story (Detailed)

The player will embody an unknown character who has a speech impediment and they will need to assist the character in answering the questions that the person is asking them. The player will start by saying the word 'Hello' which will initiate the start of the conversation. They will only see the mind during the whole experience but they will be able to hear the conversation of the person they will be speaking to outside of the mind while they will also be able to hear the thoughts of the character that they are embodying.

When the experience begins they will hear this conversation between the player and the speaker:

SPEAKER

"Hi, Really nice to see you again, how have you been?"

PLAYER

"Very Good Thankyou"

SPEAKER

"Glad to hear, how has work been for you lately?"

PLAYER

"Stressful, but pushing through"

SPEAKER

"oh okay, oh how is your partner lately, still together I trust?"

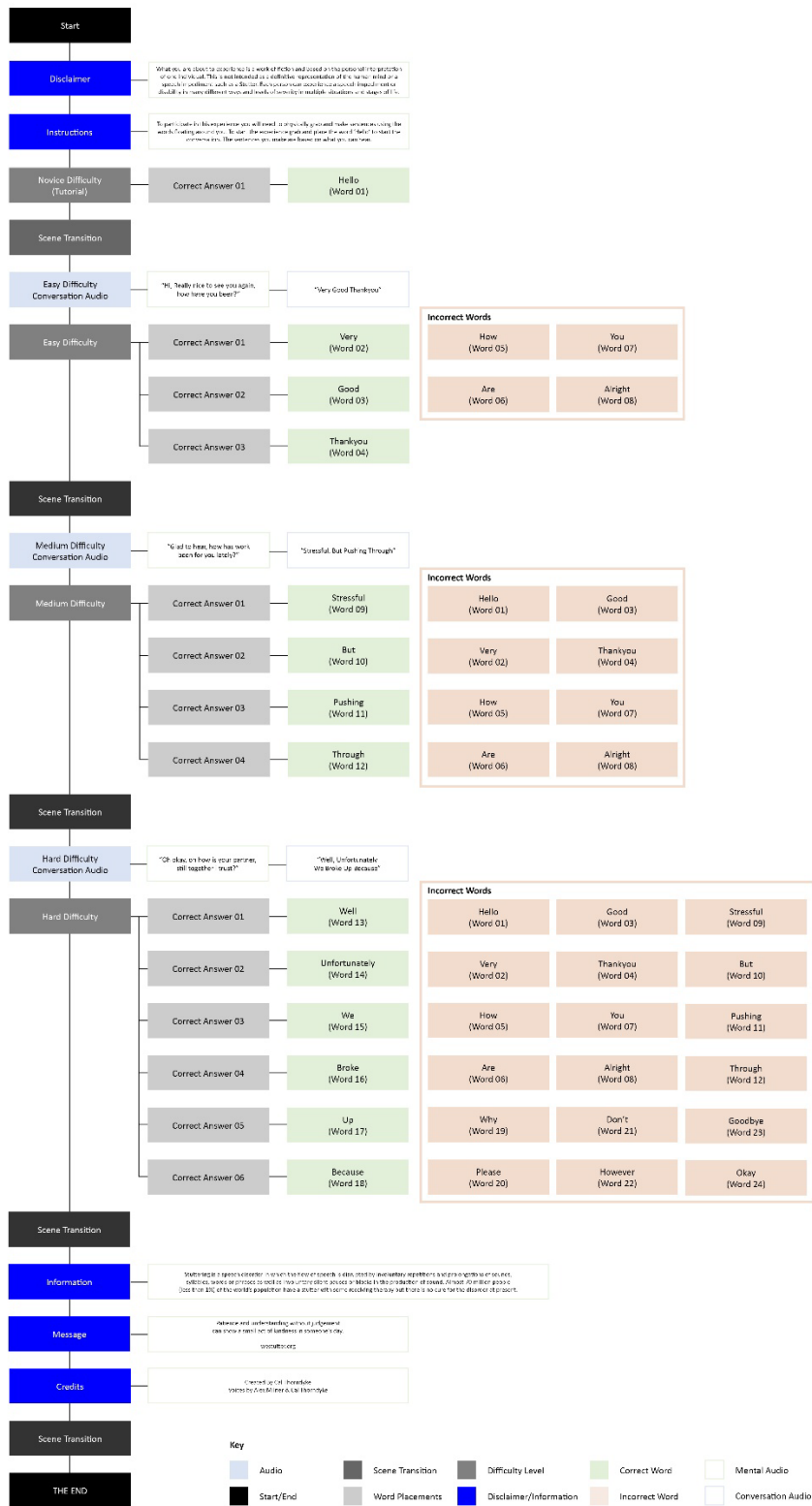
PLAYER

"Well Unfortunately, We broke up because..."

The story is very simple and a rather quick conversation but these three back and forth conversations have a different level of social intensity from asking the player a generic question, to intruding further into their personal lives which you would be more anxious to answer and therefore are more likely to stutter during this conversation. This is the overall arching story for this experience but there is also a subtle underlying narrative behind the design of this environment to show an awareness and to create a possible understanding of speech impediment for anyone that tries this experience.

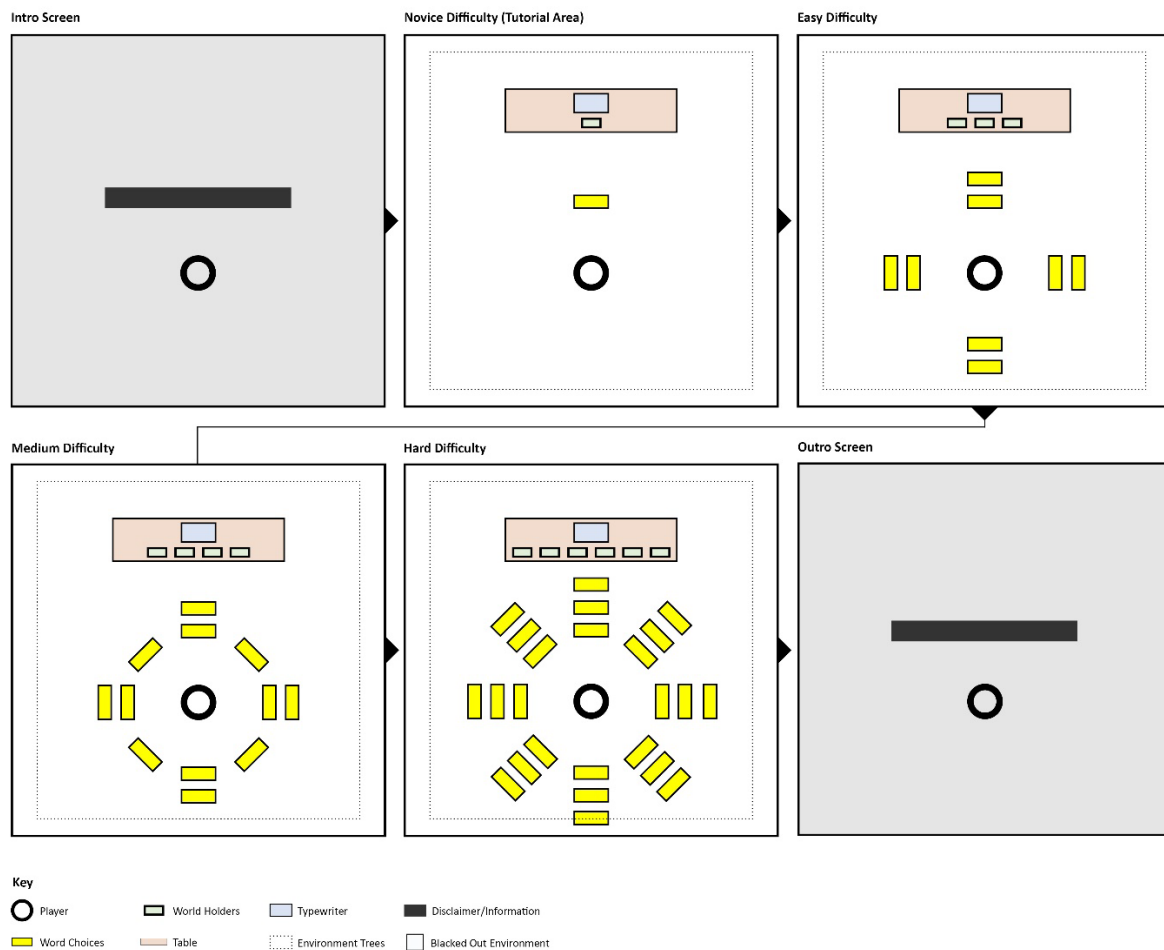
The Player Journey

Stutter - Players Journey



World Layout/Level Design

The environment that the player will be in



Gameplay (Brief)

The player will be able to move and navigate around a small environment based on an abstract interpretation of the human mind in which they will need to physically grab and place different words onto a table in front of them to create a full sentence. Once the sentence is complete the next stage of difficulty will appear and this will be repeated until all difficulties are completed and all sentences have been created.

Gameplay (Detailed)

Through the different stages of difficulty in this experience the player will see multiple words that are floating around them with each stage of difficulty increasing the speed in which the words move around the player and the amount of words on show at that given time. The player will spawn in the middle of the environment with the words floating directly around the player and depending on each person they may be able to stand still and reach the words around them. For the player to move around the environment they will need to use the left hand joystick to move the character around the environment. For the player to look around in a different direction they will need to use the right hand joystick to rotate the camera around the environment.

The player will be able to move around the environment very freely but there will be boundaries and borders at certain stages all around the player if they move too far into the 'forest' sections of the environment. The player will be able to see their hands during the entirety of the experience and when their hands collide with any of the words in the environment they will hear that word spoken out loud and this will happen anytime that they collide with that object. When the character moves there hand into the word colliders and presses the inner trigger on either left or right hand controllers they will be able to grab the objects from the air and hold them in their hands. If the player lets go of the objects after grabbing and moving said words, the word will start to move again around the environment based on the position it was left in by the player. So the player will be able to completely move around and change the position of the words as they please but they will not be able to lose the words unless the player specifically tries to move them into territories that are out of bounds.

After the player has grabbed and picked up an object, if they have the correct word they will be able to move the object into one of the 'Word' holders which will then snap into place indicating that the player has chosen the correct word and this word will then disappear from the players hand and no longer be intractable. If the player chooses the wrong word and attempts to place that word into one of the 'Word' holders the word will highlight in Red indicating to the player that it is incorrect. When the incorrect word is moved out of the 'Word' holder collider it will revert to its previous color of yellow allowing the player to let go of the word and attempt another.

Ethics of the experience

Due to the possible sensitive subject matter of this experience since it is based on a real-world speech impediment some ethical challenges will need to be addressed. This is a personal interpretation of a 'Stutter' and so this will not be relatable or understandable for everyone and other individuals who also have a speech impediment may not agree with how speech impediments are being shown. The way to resolve this issue will be to have disclaimers and information regarding speech impediments within the experience at the start and end to explain to the user what the experience is they will be participating in.

Introduction Disclaimer

- What you are about to experience is a work of fiction and based on the personal interpretation of one individual. This is not intended as a definitive representation of the human mind or a speech impediment such as a Stutter. Each person can experience a speech impediment or disability in many ways and levels of severity in multiple situations and stages of life.

Experience Information

- Stuttering is a speech disorder in which the flow of speech is disrupted by involuntary repetitions and prolongations of sounds, syllables, words or phrases as well as involuntary silent pauses or blocks in the production of sound. Almost 70 million people (less than 1%) of the world's population have a stutter with some receiving therapy but there is no cure for the disorder at present.

Message to Player

- Patience and understanding without judgement can show a small act of kindness in someone's day. Westutter.org

Assets Needed

2D

Textures

- Book/Page pattern Texture

Sprites

- White Text PNGs
- White Disclaimer Text and Information

3D

Characters List

- N/A

Environmental Art Lists

- Cherry Blossom tree (3D Model)
- Desk (3D Model)
- Books (3D Model)
- Origami Figure (3D Model)

Sound

Background Music

- Forrest Ambience Sound Effect/Background Audio

Easy difficulty Scene

- Easy Difficulty Answer Audio
- Easy Difficulty Question Audio

Medium Difficulty Scene

- Medium Difficulty Answer Audio
- Medium Difficulty Question Audio

Hard Difficulty Scene

- Hard Difficulty Answer Audio
- Hard Difficulty Question Audio

Sound List (Player)

- N/A

Character Movement Sound List

- Example 1, Example 2, etc.

Character Hit / Collision Sound list

- Word Trigger sound effects: When the player touches or interacts with any of the words around the environment, a sound file of a voice saying that word will play.

Other sounds

- N/A

Animation

Environment Animations

- Fade Transition Animation
- Word Pivot Animations (Easy, Medium and Hard Difficulties)
- Introduction Screen Animation
- Outro Screen Animation
- Wrong Word Colour Change

Character Animations

Player

- N/A

NPC

- N/A