GAME DESIGN DOCUMENT

TEAM INFORMATION

Team Name	Mega Power Up!	Team Code	0B121704
Team Member #1	Dylan Winston		
Team Member #2	Liam Dowling		
Team Member #3	William Ng		
Team Member #4			

Game Overview

| Game Title |
|---|
| **What will your game be called?**
How does the name of your game help potential players to recognise what the game might be about? |
| Scalyze, the name comes from the theme scale and that represents the theme by our title of the game. |

Game Description

This game is a platformer game with a unique twist. All the levels have portals scattered in them and you must use them to your advantage in order to beat the level. You can turn bigger, jump higher and move faster only if you go through a portal and transform into a bigger size. Yellow=big blue=normal green=small.
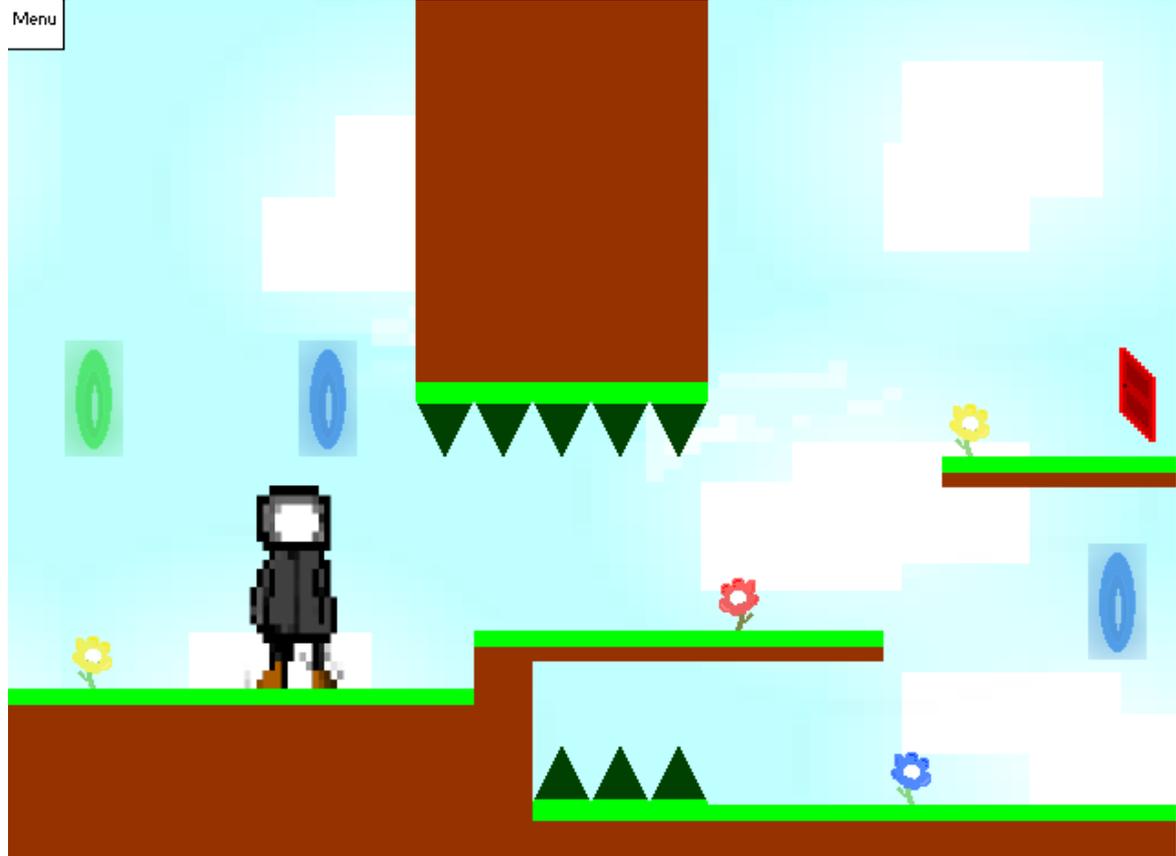
Audience

We are aiming for the game to be for everyone because it doesn't contain challenging memorization or skill. This game doesn't force the player to do anything too challenging.

Characters/Roles

You are a scientist that is working on portals that gives you the ability to change size. You are just looking at some of the notes and a spider comes from the roof and gets sucked in the portal and sucked into the yellow portal (big portal) causing destruction on the city. While the spider causes destruction upon the city, portals are being flung around u must use the portals to escape the chaotic city.

Environment

Where does the game take place?
Under what conditions?
Do these conditions have any effect on the gameplay that you might need to consider?

In a lab and escaping in the mountains working your way to get yourself out of the city.

As the theme is scale, the main game mechanic is about scaling and to make our player scale themselves they have collide into a portal and complete the level.

Gameplay/Mechanics

Objectives/Goals

What sort of game are you making?
What is the aim of the game? What is the player trying to achieve?

This game is a simple platform game with scale as the main game mechanic. The aim of the game is to complete all the levels to escape the giant spider!

Perspective

What will be the players' perspective when playing the game?
Will they experience the game from a first-person point of view? From the side (like a platformer)? From a top-down perspective?
Will it be a two-dimensional(2D) or three-dimensional(3D) game?

It's a simple 2D game with a third person view so you have the best idea on where you're heading from the start.

Controls

How will players actually play or interact with the Game?
What are the controls?
How will they work?

How you play the game is simple, you control the player by using the arrow keys on your keyboard (you can also use WASD), in order to jump you need to press the spacebar.

Reference Points/Originality

Are there other games that have similar gameplay mechanics?
Similar functionality?
Similar stories or Characters?
How will your game be different?
Why will people prefer to play your game over these games?
Is your game different enough to be worth making?
Why/why not?

Our game is sort of inspired by Geometry Dash and other platformers. They have similar mechanics as our scaling portal. We have made our scaling as unique as possible to ensure that we have an original game. We have made our gameplay as unique as possible.

Technical Requirements

Platform

What environment will the finished product run in?

It will run on Windows 10 and Windows 7 because we have done all the testing in those operating systems.

Development Environment

What will you use to build your game?

We used GameMaker 8.1. GameMaker 8.1 is a software to create games and is a good start if you are a beginner. GameMaker 8.1 is an easy software because there are blocks of code which you do not have to script yourself.

System Requirements

What sort of system, specifications or peripherals will the end user require in order to play your game?

Minimum Specifications

Operating System:	Windows 7
Processor:	1.6GHz
Memory:	2
Graphics:	512MB
DirectX:	9
Storage:	200 MB
Mouse:	Trackpad
Audio:	None/Speaker/

Recommended Specifications

Operating System:	Windows 10
Processor:	2GHz
Memory:	400 MB
Graphics:	1GB
DirectX:	11
Storage:	Text
Mouse:	Computer Mouse
Audio:	Headphones

The game does not require a lot of memory to run. It would also be to play with a keyboard and a mouse, with a pair of headphones for the audio

Resourcing/ Capability
What tools will you need access to in order to fulfil your technical Requirements? **What skills or abilities are required?** **Which member(s) of the team will take responsibility for the technical requirements?**
We have optimized the game to run on any computer, from low spec computers all the way to gaming computers.

Visuals/Artwork/Graphics

Style
What will the basic look of the game be? **How is this represented in the visual appearance of the characters and environments?**
The game's visual appearance is one of the main aspects of it. The sprites we make are accordingly to how we want it.

Process
How will you go about achieving your desired visual style?
How will you get from the concept stage to the finished product?

Usually when I do my sprites/images I keep trying repeatedly until it's just how we want it.

Timeline

Deadline
When does your game need to be ready for submission?

The deadline is the 5th of August 2021. We have been working tirelessly to complete our game by the deadline. We must debug our game and to test our game by the 5th of August 2021.

Timeline
How does the deadline affect other components of your game?
What components are the priorities for you to begin work on immediately?
What components can wait?
When will your game need to be ready for testing?

The deadline gives us priority on what to do first. The deadline gives us the need to prioritise the gameplay and mechanics over design aspects such as music.

Components that are deemed essential such as gameplay, mechanics and storyline are more important than aspects such as music and art. Testing as early as possible was decided to be done because with testing as a player we can decide what elements of the game are to be adjusted and fixed better to suit the player.

Responsibility
Which member(s) of the team will take responsibility for meeting deadlines?
How?

William does most of the coding for the game and any miscellaneous tasks he gets asked to do.

Dylan is the artist and our lead producer for our music for our game.

Liam is our tester and level designer for our game. He also helps create the GDD.

We work together to get ideas off each other to improve our game.

Other Considerations

Submission Guidelines

How will you ensure that your game is acceptable for Submission?
What steps will your team take to ensure that your game adheres to the submission guidelines

To ensure that the game is suitable for submission we have made a checklist that allows us to determine whether our game adheres to the guidelines.

Submission Guidelines Checklist	Adheres To Guideline	Notes
Not Contain Unsuitable Material	X	Must Have No References To: Gambling, Discrimination, Illegal Activity, Impersonation Of Real People, Nudity, Profane Language, Sex, Drugs, Violence
Classified As A G Rating Or E For Everyone	X	Must Conform To The Standards Of Either 'G' From The Australian Classification Board Or 'Everyone' From The Entertainment Software Rating Board
Cannot Contain Any Intellectual Property Unless It Is Part Of The Game Engine	X	Must not contain any intellectual property, including footage, images, artwork, programming or sounds that are not created by the Applicant unless such content is included as part of the Game Engine;
Most Only Contain Work From Team Members	X	Must be solely the Registrants original work and must not be created in collaboration

		with any other individual or entity
All Submitted Games Must Run In A Microsoft Windows Operating System	X	Unity Supports Building For Windows
All submitted games must utilize a keyboard and mouse based control system	X	Added ability to rebind keys to avoid issues with device compatibility
All submitted games must function, first and foremost, as single-player games	X	Designed from the ground up to be a single player game
All submitted games must function/run independently of a need to download/install specific game development software, or additional software.	X	Unity's builds are standalone
Submitted games should refrain from the use of store-bought or purchased assets	X	Did not purchase or use any purchased assets in the making of the game

Breaching, or failing to comply with these classification guidelines may result in disqualification of the entry. In circumstances where these guidelines have been severely breached or ignored, the Australian STEM Video Game Challenge may notify the Parents/Guardians, listed school and Mentor of the registrants and provide particulars of the offending material.

Other

Are there any other things you might need to consider before you begin work on your game?

One of our biggest issues this year was not quite finishing it before lockdown again. We have been in lockdown all term so we were unable to complete at school. We have managed to work together via Microsoft Teams with each other and our teacher.