

Hello Games Design Test

Hi all this is a video explaining a recent project I did to help my application for a job at hello games the creators of well-known No man's Sky and the last campsite. This is similar to a design test, but I did not get given this design test by a company but challenged myself. I tend to do this when I'm applying to a studio that I'm particularly passionate about to help me stand out against other applicants.

I started by simply playing through the game. As I progressed, I develop my own Game design document, taking note of the player objective and game mechanics, two elements of the game that would be important to know about if I were to design my own level or puzzle for the game.

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GDD

Character: Ember


Top down, side on, click to move puzzle game.





Puzzle Elements

The Forest

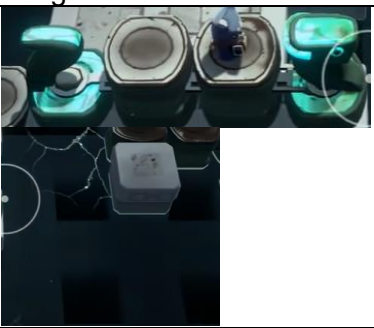

Name	Function	Image
Branches	Burnable, blocks player	
Fire	Gives player fire touch	
Air fan	Blows out touch / fire / ember	
Switch	Change geographic element in the scene from on or off	
Ember	Player goal	
Stone cylinders	Can be moved by player in one direction, and can be used as bridge	
Turner	Change geographic elements in the scene	
Totem	When in socket will activate	
Totem Statue	Will activate when in a specific rotation	

The Marsh

Name	Function	Image
Metal blocks	Can be moved with horn	

Metal blocks socket	When metal block is in socket something will activate	
Pressure plates	Must be press in a specific pattern	
Fire ember	Can be blown out by fans	
Metal cylinder	Can be moved with horn	

The Cave

Name	Function	Image
Moveable snake	Can be moved with horn, but only over set areas of water	
Activation platform	Will be activated when the moveable snake is positioned over it	

Some of the puzzles in the game were quite small so for this reason I thought just designing a single puzzle won't be enough of a challenge for me so I thought I would design three puzzles as that sounded like a nice number to aim for.

There are three main sections of the game The Forest, The Marsh and The Cave. Each introduces new mechanics to the puzzles so I thought it would be fitting that I designed a puzzle for each area. That way each one of my puzzles will allow me to use different mechanics.

Process

For my process one of the first things, I do is establish design goals. These will be created and informed by my understanding of the games core design and intentions. I will be designing puzzles, the context for puzzles in the game is that you are helping to solve some kind of problem that a character has they are referred to as a "forlorn". The problem that the character is facing often it represented in the puzzle. For example, one puzzle is based on a turtle character who is a chef, he's hunched over a cooking pot but the fire has gone out. The puzzle that the player solves has you collecting a ember a fire and trying to transport it back to the character without it getting blown out. So, in this puzzle the story that the character goes

through is represented literally in the puzzle. I aim to do a similar thing with my puzzles so therefore I need to create some kind of character arc for the forlorn character before creating the puzzle and trying to see if I can integrate the story of the character in the puzzle.

Goals

- Puzzles are innately integrated within the context of the forlorn's character arc.
 - The player should be able to see a connection between the forlorn they're saving and the puzzle they're solving.
- Puzzles are short and not too challenging.
 - The puzzles in the game are relatively quick brain teasers and very accessible meaning not too complicated.

These goals represent my best guess of what the design goals would have been for the team at Hello Games.

Forlorn Characters

I will create 3 forlorn character arts for each one of my 3 puzzles. This design challenge is brief, and I don't have unlimited time so therefore this is not going to be the deepest dive into the characters so therefore I will keep it simple. Not all the character arcs I'm about to explain to you would fit into the game, game design is a lot about iteration and I'm sure with time some of these initial ideas could be turned into puzzles that would have ended up in the game but due to time I'm just telling you the initial vision of the ideas.

The Forest Forlorn

This forlorn was trying to escape the forest and climbed a section of a mountain and was caught in a storm and didn't know where they were and didn't know how to get back down, then they lost hope. Through solving the puzzle, the player will highlight some kind of path on the ground for the forlorn.

Forest Forlorn Narrator

Upon the mountain's rugged crest,

In storm's fierce grasp, I found no rest.

Lost, with no trail back to known ground,

Hope slipped away; no solace found.

The Marsh Forlorn

In the story of the game the marsh is being controlled by the forest king who is manipulating the embers into giving up hope. This forlorn was travelling through the marches and reached a point that they couldn't jump across and lost hope. The player in the puzzle will build some kind of bridge across the body of water helping the character to see there is always a way out if you are willing to create one yourself.

Marsh Forlorn Narrator

In marshes deep, my path astray,

Lost hope's light in disarray.

A bridge I sought to brave the mire,

But surrender found, quenching desire.

The Cave Forlorn

Forlorn resists and escapes the bird king only to get lost in the cave of regret. The player can help give them back their fire ember. And highlight all that ember has achieved so far.

Cave Forlorn Narrator

Amidst the forest, I ventured on,
Defied the bird king, his dominion gone.
Through caves of regret, I trod the cost,
Lost in its depths, my way was lost.

Now that I've come up with the basic stories of the forlorn characters I can start working on the script. During a number of the forlorn puzzles the narrator explains the story of the character. I'm quite dyslexic so I know for a fact that poetry is not my strong point so I created some basic statements of the story and then gave it ChatGPT to make it more poetic. It's not perfect but it will do for the sake of this project. Now that I have some narration designed for each of the stories, I can start designing the actual puzzle.

Mechanics / Sequence

The next stage is to decide what mechanics I'm going to be using in the puzzles. I've already created a list of the mechanics used in the puzzles throughout the game, and I've organised them into what was used in each stage. So I can pick the mechanics that were most interesting to me in each stage of the game and use them in my own puzzles. Additionally, I can choose the mechanics so help me to create a puzzle that best represents the story of the forlorn.

The Forest Forlorn

As I said earlier the story of this forlorn is they got lost in a storm and the player is going to show them the way out by highlighting a path. It seems fitting that fire should be used as it would fit the idea that the player is lighting the way for the forlorn. The player will have to light a series of campfires navigating air fans to eventually burn away the brambles allowing them access to the ember.

- Fire
- Air fan
- Branches

The Marsh Forlorn

So, the forlorn that was stuck in the marches was trying to get across a body of water but couldn't jump it and gave up. So, the player through the puzzle will build some kind of bridge that will represent the idea of building a bridge in the marsh. I love the metal block mechanic the sound design is really great and it's really satisfying to move them around. If the puzzle uses metal blocks, then it should also use the metal block sockets as a way of activating certain sections of the bridge the player will be building.

- Metal blocks
- Metal block socket

Narrator

Start

Upon the mountain's rugged crest,
In storm's fierce grasp, I found no rest.

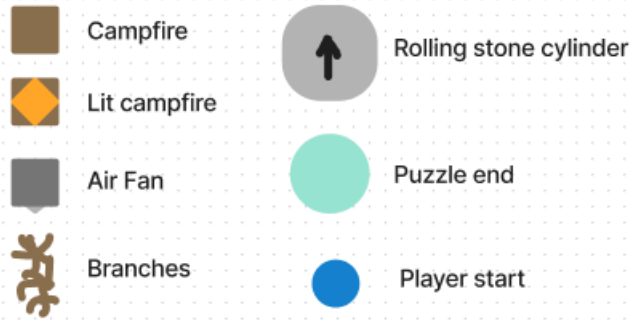
Lighting the second campfire

Lost, with no trail back to known ground,

Lighting the final campfire

Hope slipped away; no solace found.

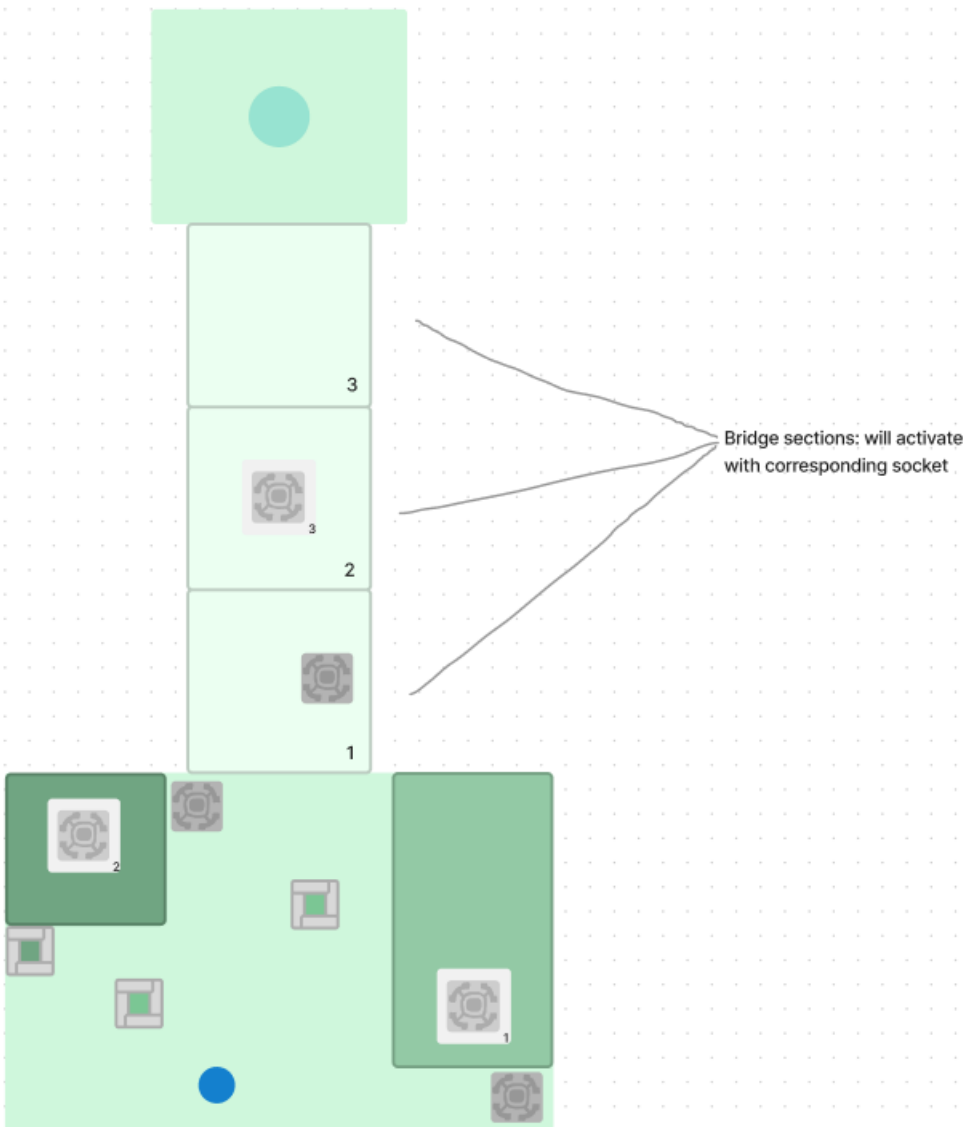
Key



Explainer

The player's mission is to get to the puzzle end point but they can't get access to it as it's covered in branches so they will need to light the 3 campfires to get a flame to burn down the branches. They are unable to directly light the first campfire as there is a fan in the way which blows out their torch so they will have to burn the branches and walk round. This will introduce that mechanic to ensure the player knows it for later. The player will then have to roll two stones in order to block the fan. They will then be able to light the final campfire, the final element of the puzzle is a combination of the last two elements. The player will be unable to burn the branches directly as there's a fan in the way so they will need to burn the branches over to the right and then roll the stone so they can then get around the back and burn the branches.

The Marsh Forlorn



Narrator

Start

In marshes deep, my path astray,
Lost hope's light in disarray.

Platform 1 activates

A bridge I sought to brave the mire,

Platform 2 activates

But surrender found, quenching desire.

Key



Puzzle end



Raised platform 1/2



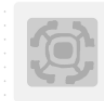
Metal block



Player start



Raised platform 1 + 1/2

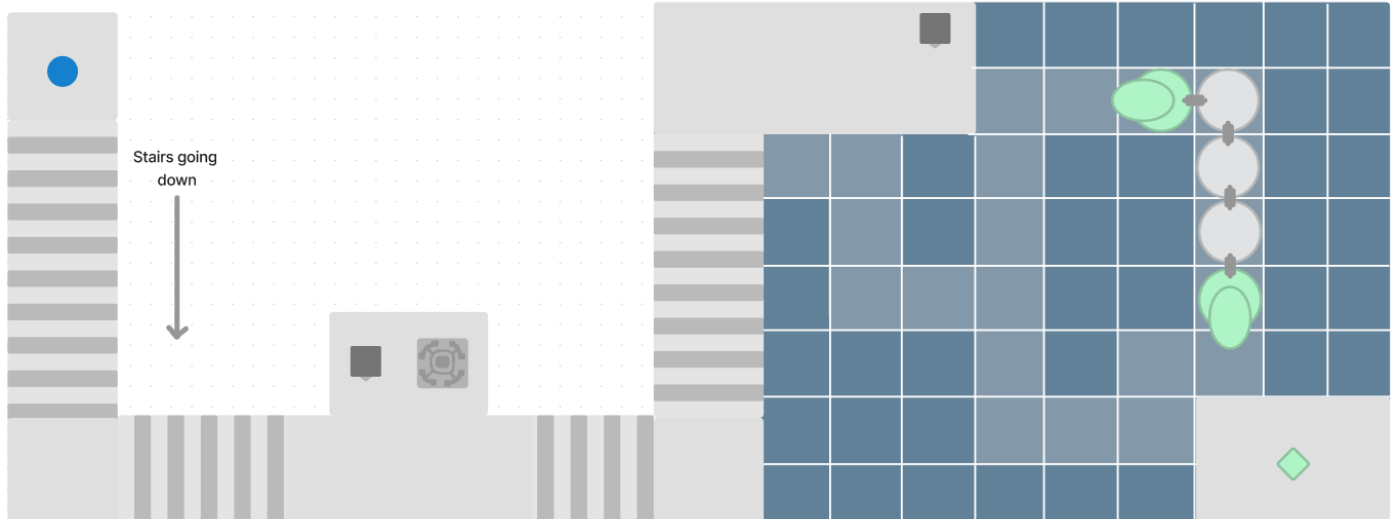


Metal block socket

Explainer

This is the 2D design for the marsh forlorn puzzle. As you can see in the image there is a bridge but the player needs to activate each section of to get across they will be given metal blocks. The metal block needs to be sat in the socket when this happens the socket will activate the corresponding bridge sections. The player will be able to move around metal blocks. With two metal blocks they will be able to activate the first platform which will give them an extra block. Then with all three metal blocks they will then be able to activate the second platform and then activate the first one again they can then take their final metal block and activate platform 3.

The Cave Forlorn



Narrator

Start

Amidst the forest, I ventured on,

Block first air fan

Defied the bird king, his dominion gone.

Pickup ember

Through caves of regret, I trod the cost,
Lost in its depths, my way was lost.

Key



Puzzle end



Metal block



Player start



Movable snack



Air Fan

Explainer

So, this puzzle has the player travelling down to the bottom right of the level to collect an ember and carry it back up to the top without the embers being blown out. The first air fan can be avoided by moving the metal block in front of it. After this the player can move the snake so they can get over to the ember but they will have to manoeuvre the snake a different way than they came so they avoid the fan. They can then walk back up the stairs and finish the puzzle.

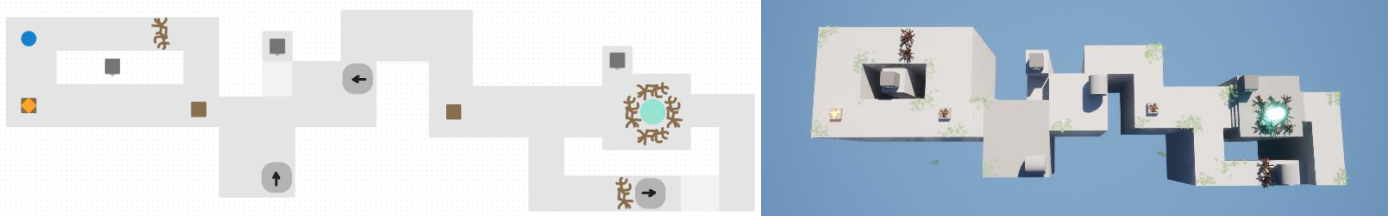
One thing I would like to say before I move on to the next stage. Game design is an iterative process ideally, I would love to make these levels puzzles functional and test them, get feedback and iterate. And then repeat that process multiple times for the time scale of this project that's not possible so it's best to think of these puzzles not as the final product but as an initial idea of what they could be.

Whitebox

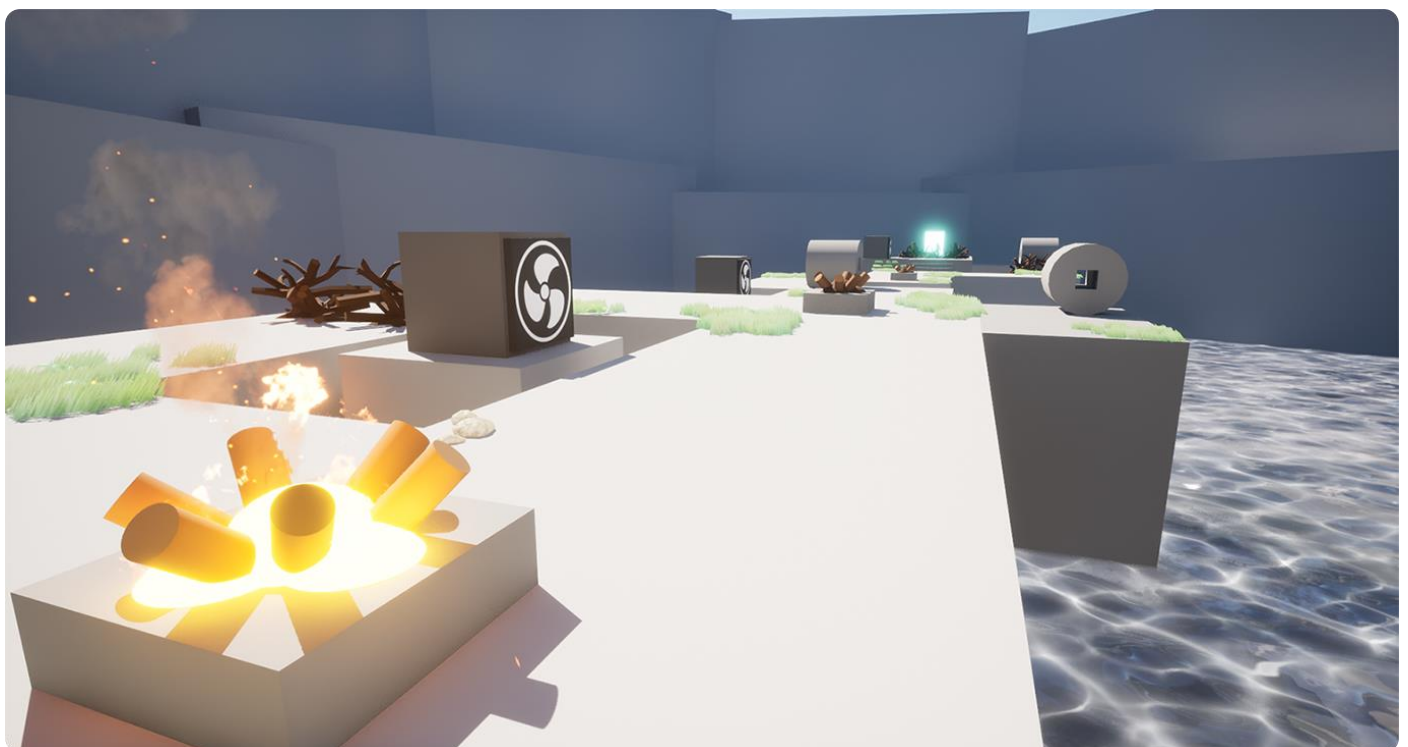
At this stage in the project the main ideas for the levels have been established, but I still think it would be a good idea to do a white box as creating these puzzles in 3D though not functional will still allow me to develop the ideas further. I will be creating my white box in Unreal Engine this is because the prototyping tools are very quick and easy to use.

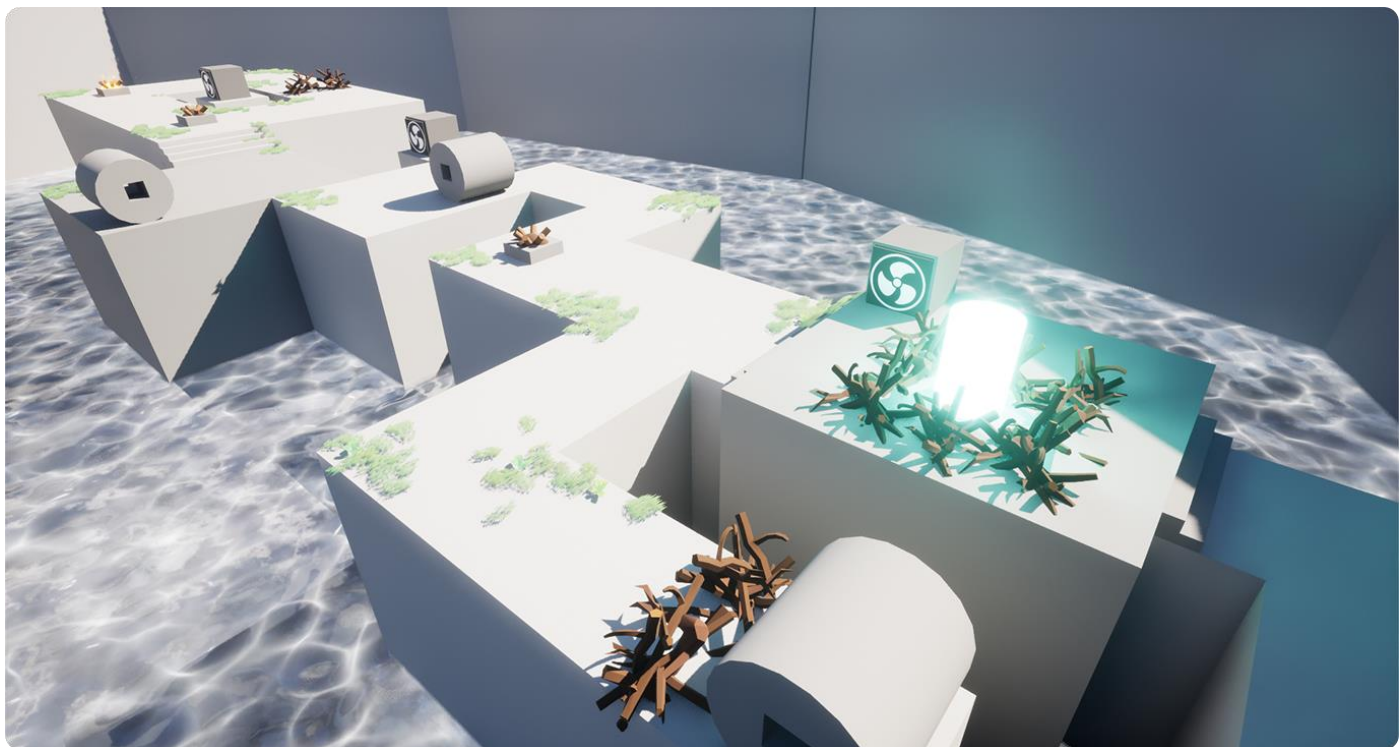
I started by making the rough shapes of the environment and then adding Polish and detail after that. I also added a little bit of verticality when compared to my 2D design as it's quite hard to design verticality in 2D and I thought the white box was looking a bit land without it so I raised some of the sections up.

The Forest Forlorn



I created various basic 3D models that represented the different mechanics that player would be using. At this stage I also decided that I was only going to white box one of the puzzles as I prefer to add a good amount of detail and Polish on one puzzle rather than rushing to complete 3 puzzle whiteboxes. I also managed to find a 3D model on sketchfab of the character Ember from the game the last campfire so I imported that into unreal and use that as the character. As a final touch I added some grass and added elements to the background of the scene to make it feel a little bit more like a real place from the game.





Thanks

Thanks for watching my little overview of this project. This has been a completely passion fuelled project I made it to help my application for a game designer position at hello games. And I thought it was probably a cool idea to make it into a video for the channel as well.