

# AUDIO ADVENTURE ENGINE

I will ask questions,  
They will be rhetorical questions

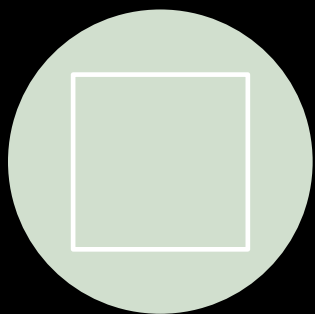
Do not answer rhetorical questions

NO AUDIENCE PARTICIPATION

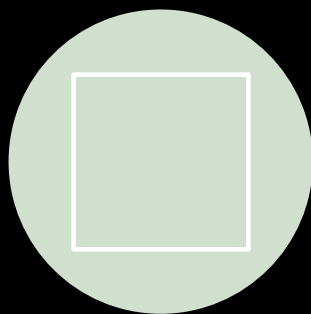
The goal is education, not entertainment

Start the hype up music

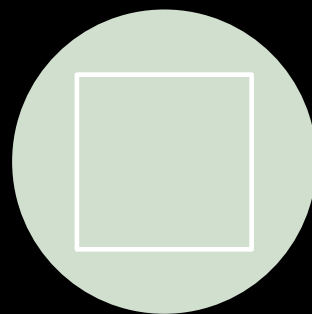
# OVERVIEW



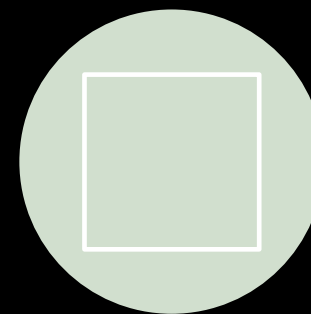
CONCEPT



SYSTEM-  
ARCHITECTURE



SOUND



STORIES

# CONCEPT IDEA

- Create auditive media for visually impaired
- Create immersive storyline
- Developpe an Engine to make creation of audio games easy



# INSPIRATIONS

- Old text-adventure games
- The last of us 2
- [TrueBlindGaming](#)

# SYSTEM ARCHITECTURE

- Simple
- Modular
- Efficient

# SYSTEM ARCHITECTURE

- Voice Recognition
- Microcontroller Input
- 3D Audio

# SYSTEM ARCHITECTURE

- Operating system?

# SYSTEM ARCHITECTURE

- Android/iOS

# SYSTEM ARCHITECTURE

- Blind people don't have smartphones

# **SYSTEM ARCHITECTURE**

Say it with me:

Blind people don't have smartphones

**SYSTEM ARCHITECTURE**

**I SAID NO AUDIENCE PARTICIPATION!**



# SYSTEM ARCHITECTURE

- The interwebz

# SYSTEM ARCHITECTURE

- WebGL

# SYSTEM ARCHITECTURE

- I was building for Windows

# **SYSTEM ARCHITECTURE**

Microsoft Voice Recognition

VS

WebGL Voice Recognition

# **SYSTEM ARCHITECTURE**

Microcontroller:

Arduino

Gyroscope

Vibration

# **SYSTEM ARCHITECTURE**

Randomized Events

Mouse Input

Fail Safe

# **SYSTEM ARCHITECTURE**

But Denise!

What about the code?

# **SYSTEM ARCHITECTURE**

This is interactive, you have to answer me.



# **SYSTEM ARCHITECTURE**

You failed the test!

# SYSTEM ARCHITECTURE

Ok, here's some code

```
7
8 public class GetGyroscopeData : MonoBehaviour
9 {
10     SerialPort sp = new SerialPort("COM10", 9600);
11     public Vector3 currentRotation;
12     public Vector3 lastRotation = new Vector3(0, 0, 0);
13     public float rotationDifference;
14
15     [SerializeField]
16     public int counter = 0;
17
18     public bool vibrate;
19
20     AudioSource wandSound;
21
22     void Start()
23     {
24         sp.Open();
25         sp.DtrEnable = true; // We configure data control by DTR.
26         sp.ReadTimeout = 100;
27         sp.WriteTimeout = 100;
28
29         wandSound = GetComponent();
30         wandSound.Play(0);
31         wandSound.Pause();
32     }
33
34     void LateUpdate()
35     {
36         readSerialInput();
37         getGyroscopeDifference();
38         increaseVolumeWithcounter();
39
40         this.transform.rotation = Quaternion.Slerp(this.transform.rotation, Quaternion.Euler(currentRotation), Time.deltaTime * 2f);
41     }
```

100 % Keine Probleme gefunden

Ausgabe

Ausgabe anzeigen von: Quellcodeverwaltung - Git

Öffnen von Repositorys:

C:\Users\denis\Documents\GitHub\Orientationproject\_2020

# SYSTEM ARCHITECTURE

If you want to read about code, I have  
documented everything here:

[https://github.com/DeniseBischof/Orientationproject\\_2020/wiki](https://github.com/DeniseBischof/Orientationproject_2020/wiki)

My assistant will send it in the chat

# **SYSTEM ARCHITECTURE**

Spatial Audio

Sound Particles

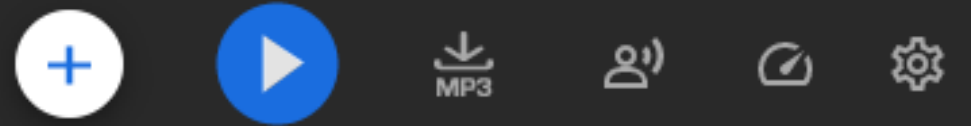
8D! Audio

# SOUND

- No voice actors
- No decent studio

# SOUND

# TEXT-TO-SPEECH



☐ Dyslexia Font

THE BEAST, IN THE KAY-VVE

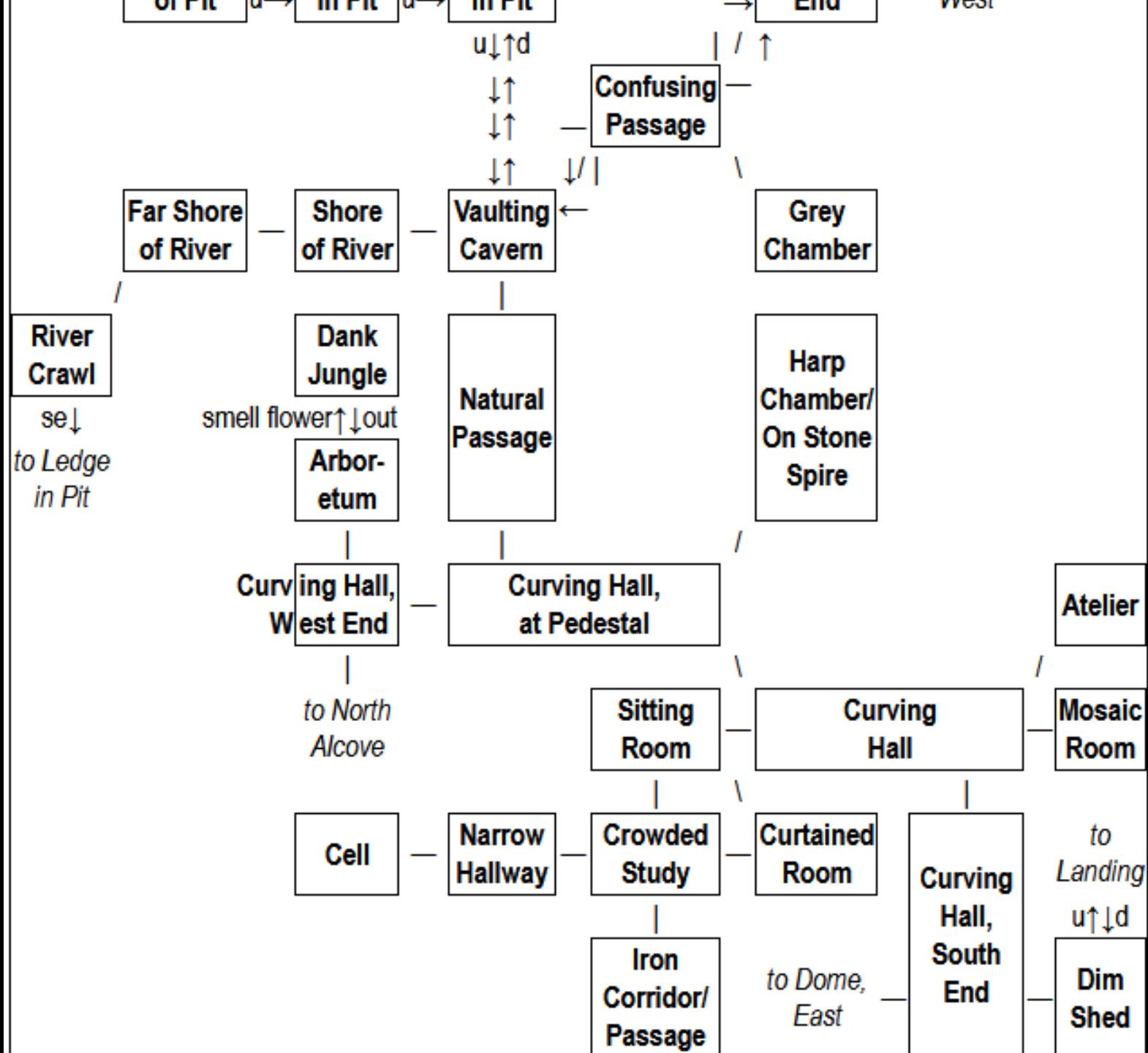
# SOUND

- Audacity
- Freesound.com
- Unity Spatial Audio



# FIRST IDEAS

## THE DREAMHOLD



# FIRST IDEA

- Too big
- Too complex

# FIRST IDEA

- Search for new ideas
- Found twine

# **FIRST IDEA**

Lost too many hours of my life

# FIRST IDEA

- Played in total over 68 hours
- Found „I told you this was a bad idea“
- Got better at story writing

# FIRST IDEA

- Played in total over 68 hours
- Found „I told you this was a bad idea“
- Got better at story writing...

# FIRST IDEA

- Played in total over 68 hours
- Found „I told you this was a bad idea“
- Got better at story writing... not?

# OUTLOOK

- A lot of bugs to fix
- Twine integration? Would be rad



# OUTLOOK

- Audio only playstyle can be extremely immersive
- Very nice to do while doing other things

# OUTLOOK

- User feedback (is it ok if I add this later, it is just going to be a picture I think)

**Trailer**