

Smart Digital Library, Metaverse Dido

TEAM15

CONTENTS

1

Overview

2

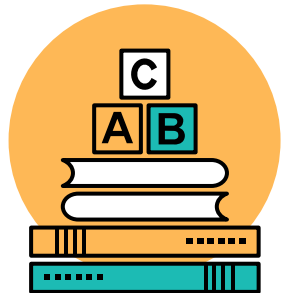
Goal & Method

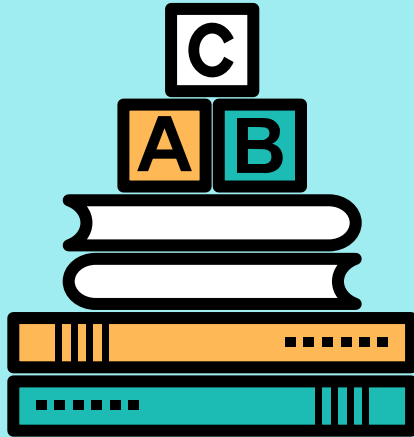
3

Team & Plan

4

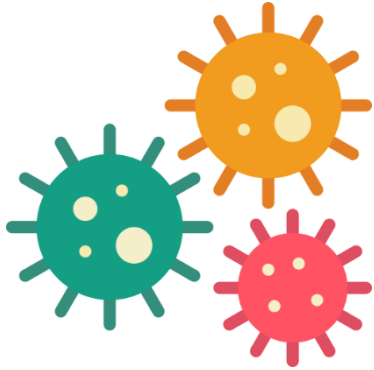
Effect





1. Overview

Background



COVID-19

Restrictions on the use of multi-use facilities due to COVID-19



Library

Expand the user base by connecting various media materials in the library to a virtual community



Metaverse

Perform multiple functions such as online meeting, media room, and chatbot in the metaverse

Background



ONLINE MEETING

01.

Online meeting service grow 3.3 times more than before COVID-19 as non-face-to-face requests increase after the pandemic

The e-book usage rate is growing at an average annual rate of 303%, reaching \$20.8 billion in the global publishing market, accounting for 18% of the total



E-BOOK

02.

Smart Digital Library, Metaverse Dido

Background



OTT SERVICE

03.

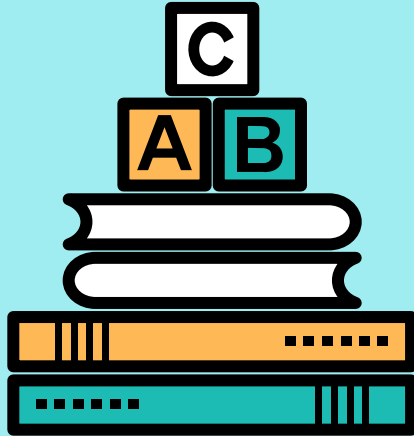
OTT captivates people's eyes and ears among non-face-to-face services, allowing users to consume desired contents anytime, anywhere, transcending time and space constraints

Chatbot creates virtual customer service agent that provide 24/7 service, and play a variety of roles including marketing, sales, and daily tasks



CHATBOT

04.



2. Goal & Method

Development of a Virtual Library in Unity & VR Chat for Smart Campus

Our Goal



ONLINE MEETING

Creating a virtual meet-up discussion facility



KINGOBOT

Provide School Life and Academic guidance



READING ROOM

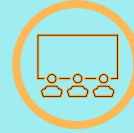
Create an information hub that utilizes E-books database and private rooms



DVD ROOM

Open streaming platform

ONLINE MEETING ROOM



**Video Conference
System**



**Seat reservation
management**



**Video View
Material sharing**



Annotatable Board
Creating an
interface to write

KINGO BOT



24-hour solution
School Life and Academic-
related Inquiries

READING ROOM



Reservation system

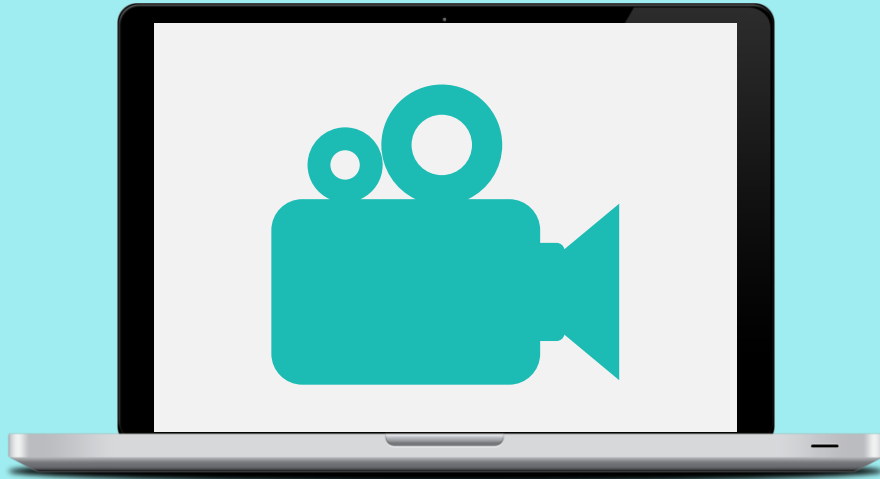
Metaverse room reservation
for private use



E-Book

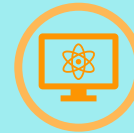
24/7 Accessible
reading material

DVD ROOM



Video Streaming

Screening by utilizing public API (e.g. Youtube)



Pre-recorded Lecture

Provide mock class environment

Development tools



VRChat

User Interaction
with Library
Environment



Unity

3-Dimensional
World Creation



Flask

E-Book Database
Access & Enable
Chatbot service
using API

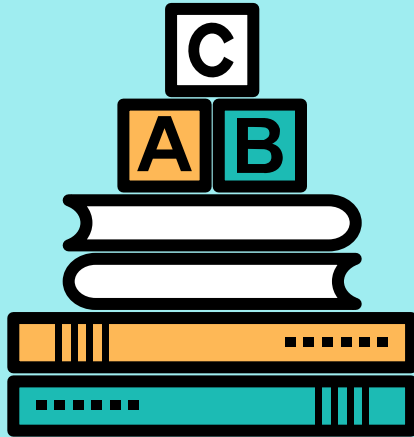


MySQL

Relational
Database
Creation and
Maintenance

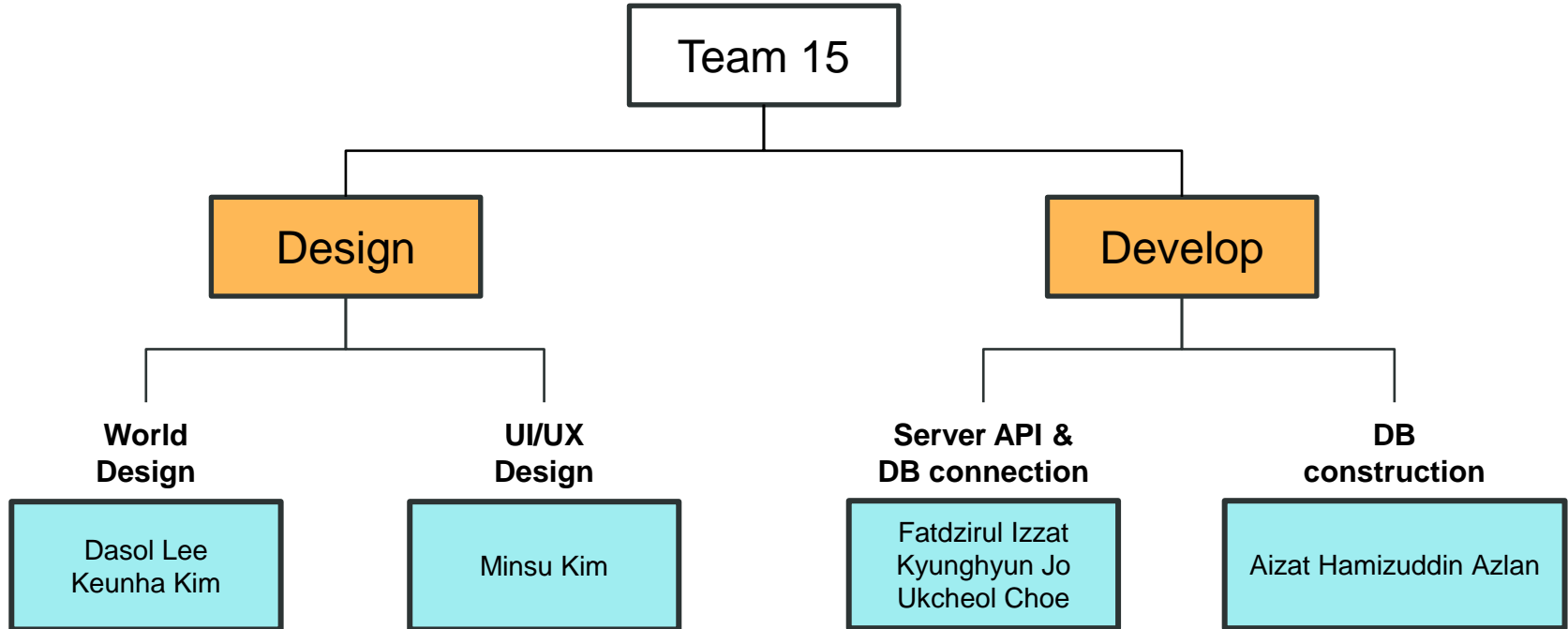
Frontend

Backend



3. Team & Plan

Team formation



Planning in details



step1

4th week of September
~ October

- Plan and Design the Metaverse World by Unity and VRChat
- Set up server and API with **
- Construct Database storage using **

Dasol

Keunha

Minsu

Izzat

Kyunghyun

Ukcheol

Aizat

step2

November

- Improve UI/UX design of specific functions
- Integrate server and database

Dasol

Keunha

Minsu

Aizat

Izzat

Kyunghyun

Ukcheol

step3

Mid November
~ December

- Connect frontend and backend
- Modify and supplement the service

Dasol

Keunha

Minsu

Aizat

Izzat

Kyunghyun

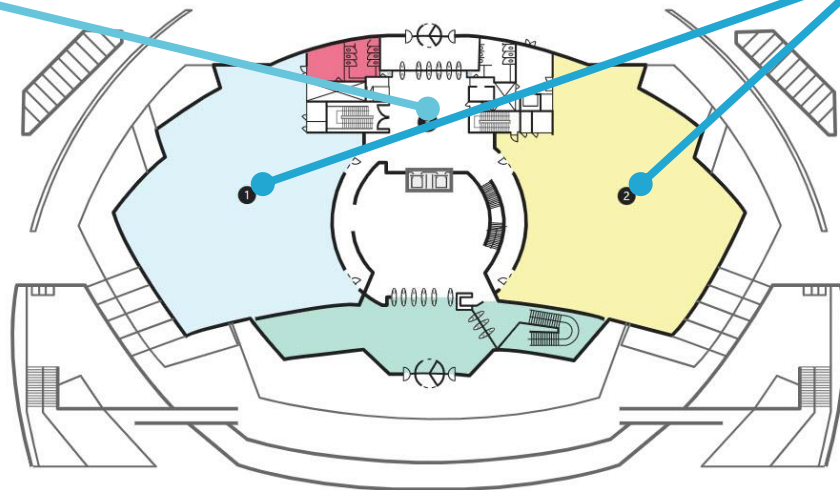
Ukcheol

1st Floor

Kingo Bot



This bot will help you with
your campus life and
Academic inquiries.



Reading Room



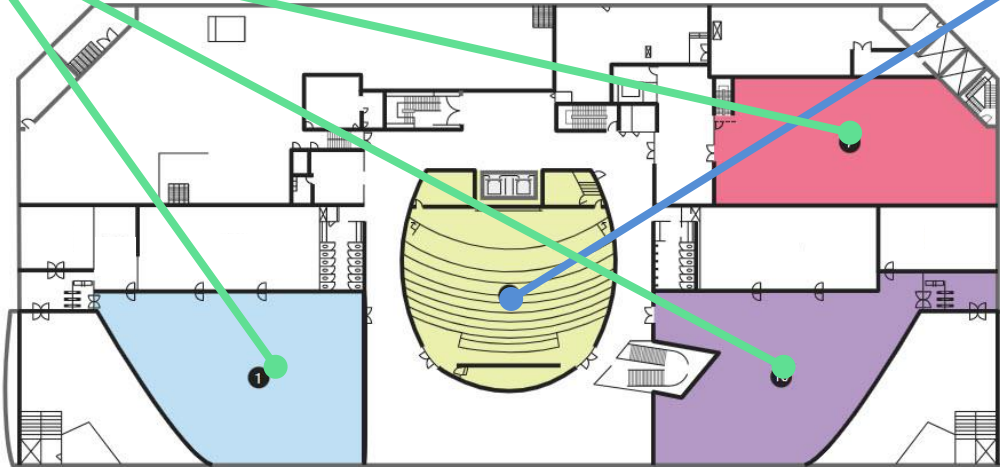
If you enter this room,
you can read E-books anywhere.

2nd Floor

Meeting Room



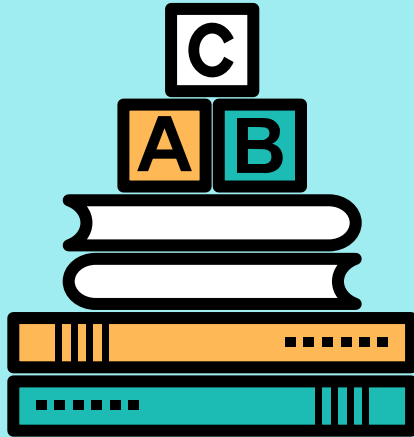
You can reserve this room to meet in metaverse. You can see video together and also use white board to presentation.



DVD Room



You can see some movies, lectures, etc.



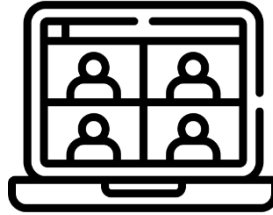
4. Effect

Expected Effects

Effects & Benefits



Borrow and Read books



Conference



Get information

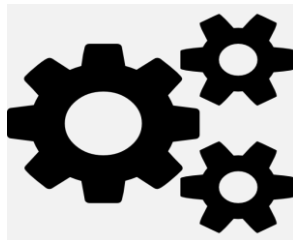
**Without threat
of Pandemic
Any time
Anywhere**

**Can access
data In the
absolutely new
world**

**Innovative
Active
experience**

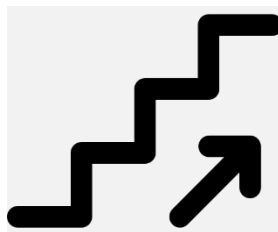
Maybe in future

This project can be fundamental of...



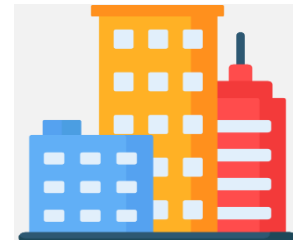
Add another functions

Actions can do in our library



Add another floors

Like our real library, provide expanded space



Add another buildings

In SKKU such as classroom