

Metaverse GLS schoolbag system

Team 1

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Part 1.

Overview



1.1 Overview

Background

CURRENT SITUATION



COVID-19

COVID-19 IS SPREADING, AND RECENTLY, SOCIAL DISTANCING STAGE HAS RISEN TO LEVEL 4.



NO COMMUNICATION

TWO YEARS HAVE PASSED SINCE MOST OF THE CLASSES BECAME ONLINE. FRESHMAN STUDENTS RARELY COMES TO THE CAMPUS.

SOCIAL RELATION BECAME HARD TO COME BY DUE TO SOCIAL DISTANCING.



NON-FACE-TO-FACE CLASSES

ALMOST ALL ACADEMIC WORKS ARE DONE ON ONLINE.

1.2 Overview

Background

PROBLEM



SYLLABUS AND SAMPLE
LECTURE ARE IN THE I-
CAMPUS, BUT THEY **RARELY**
HAVE SUFFICIENT
INFORMATION.



NO WHERE TO **ASK**
QUESTION ABOUT THE
COURSE.



LACK OF SOCIAL RELATIONSHIP
LED TO LACK OF INFORMATION
ABOUT THE COURSE.



TAKING A CLASS ALONE IS
MORE DIFFICULT THAN
TAKING WITH ANY
ACQUAINTANCE.

Part 2.

Goal



2.1 Goal

Goal



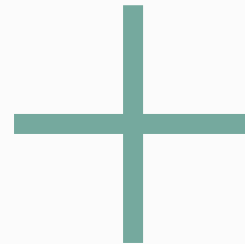
Making GLS schoolbag system with metaverse



Watching preview lectures and putting the course in the school bag



GLS



Metaverse

2.1 Goal

Goal

Final goal of the project

Providing opportunities for communication among applicants and providing information of subjects.

2.1 Goal

Goal

Detailed Goals

- Allowing intuitive selection of major and subject by Vrchat's functions.
- Putting the subjects in schoolbag so that they can be checked again later.
- Checking the number of students and competition rate for each subject in the schoolbag in real time.
- Students who want to register for a specific subject can gather and share information in advance by communication space.
- Even after applying, students can share information and find friends to take the same subject with, in communication space.
- Other information (class hours, professors in charge, etc.) also can be checked.

1.2 Overview

Background

QUANTITATIVE GOALS

01

At the minimum, all subjects within the College of software and informatics should be implemented.

02

Up to 20 people can enter the communication space.

03

The information should be displayed within 3 seconds when the subject is selected.

04

If there is a change in the competition rate for each subject, it should be reflected in 3 seconds.

Part 3.

Method



4.1 Method

Development Tool

PLATFORM



Large-scale multi-user online **virtual reality social services**.

In this game, players can interact with other players implemented as 3D character models.

DEVELOPMENT ENVIRONMENT



A game engine that provides a **development environment** for 3D and 2D video games.

DATABASE



For **database management**.
MySQL is the most commonly used open source free program.

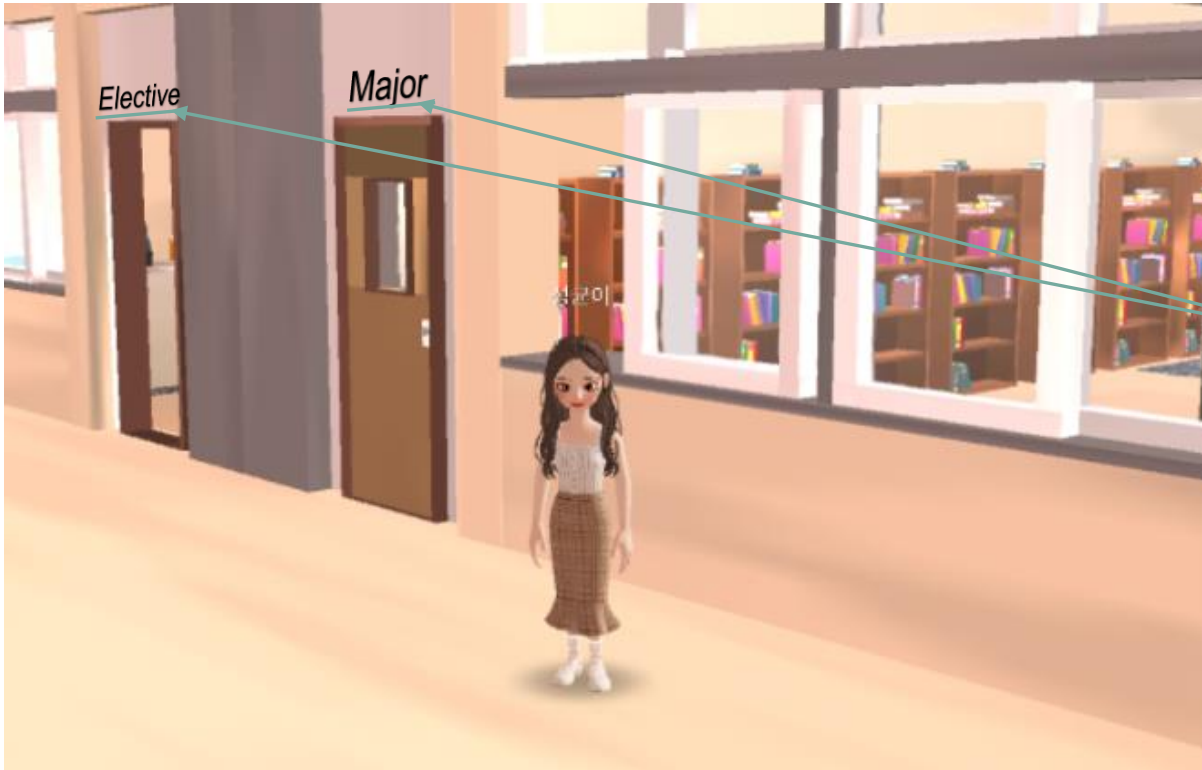
LANGUAGE



Unity basically supports C# **programming languages**.

4.1 Method

Functional Details



First, you must log in to the Metaverse GLS schoolbag system.

Enter different doors depending on your major or elective course.

And choose your college and department

4.1 Method

Functional Details

You can see the subjects that correspond to your chosen.

If you choose a book on the subject you want to take, you can see at a glance **videos containing parts of the lecture, lecture information, lecture evaluation, and real-time competition rates.**

Also, you can **put it in a backpack** if you want. This backpack can be viewed at any time by simply logging in to the Metaverse GLS schoolbag system.



4.1 Method

Functional Details



For classmates who take lectures alone, there is also a **space** where students who take the same class can **communicate in advance** before registering for classes.



It can be expected to have the effect of facilitating communication between seniors and juniors by **marking grades** with names on the head.

Part 4.

Schedule



4.1 Schedule

Detailed Schedule

STEP 01 Requirement Specification

Specifying a collection of the set of all requirements and function that are to be implement on the design.

STEP 02 Design Specification

Design and describe how a system performs the requirements outlined in the requirement specification

STEP 03 Implementation

Implement the requirements and function which are specified in step1 and step2

STEP 04 Check Code Quality

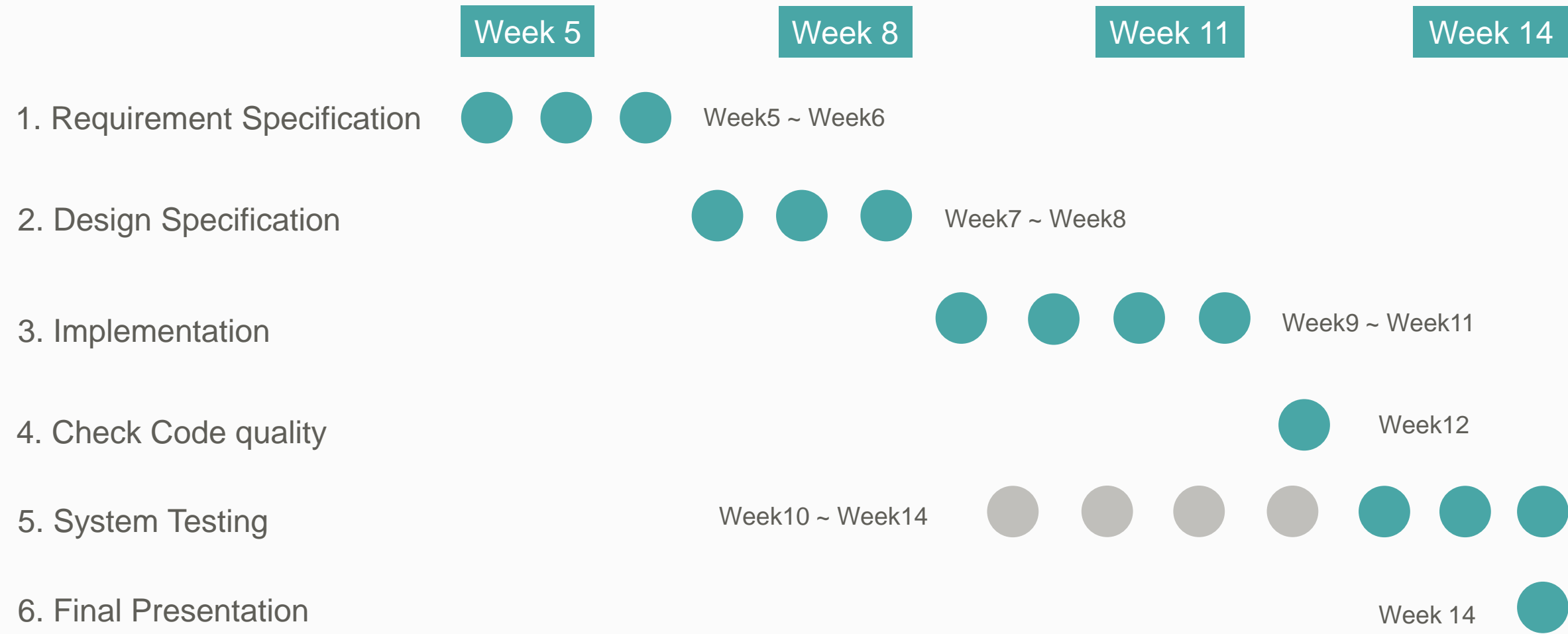
Reduce the size and complexity of the code to make code readability

STEP 05 System testing

Make demo program and test the whole system to discover problems and error.
During implementation, testing the system by making demo program.

4.1 Schedule

Detailed Schedule



4.1 Division of Works

Detailed Division of Works



Design



Design the VR CHAT world and avatar

김한별 – Design VR CHAT **World**

나현승 – Design VR CHAT **Avatar**



Develop



Develop the requirement and function

이선예, 이현정, 장환승



Database



Crawling the data and design DB

Crawling the data – 박서왕

Design and implement DB – 박예빈

Part 5.

Expected Effect



5 Expected Effect

Expected Effect

First. Revival of Communication

It is possible to promote the sharing of subject information among seniors and juniors that have been cut off due to Corona.

Second. Intuitive GLS

The inconvenience felt in the previous GLS can be solved in the Smart Campus.

Last. Helpful for subject selection

Information exchange about which subject is best choice for you is easy and well done.

감사합니다