



Metaverse Campus SKKU Flea Market System

TEAM10



성균관대학교



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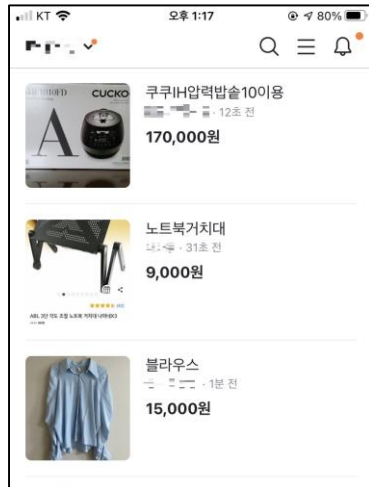


Overview

Background



everytime



당근마켓

VS



Metabus Flea Market

There are some flea market service in a form of bulletin board.

We provide real flea market with metabus space and real communication.
to make the users feel like they are at the actual flea market.

What do we want to make?

01

Coronavirus

Corona Virus made us to separate from each other. And that reason leads us to contact online more and more.



02

Beyond the World

People keep trying to contact each other, and do communicative activities via online.



03

Flea market system

For example besides '당근마켓' or 'everytime' system, there is online flea market system in Maple story also.



We have already experienced these kind of market system

*Making a **communicative market system** that goes beyond the limits of space and time*



Goal & Methods

Our Flea Market Services

Trade, buy and sell the items at university!



Promotion System

Promotion System provided by the operator, for seller or the buyer.



User Friendly

Providing users system that they can check items and prices at a glance.



Auction

Building the bidding system for the flea market, auctions.



Integration Ability

Whole system is compatible with other smart campus metaverse.



Security System

Creating environments where fraud or crime cannot be committed.



Self-Purification

Users can review each other for whom use the platform afterwards.



System Stack



System

Graphic

Operation

Avatar

Database

Security

Recommendation

World

Review Integrity

VR Chat

Unity

Methods



System

Promotion

Board

Announce Popular Item

Auction

Show highest price

Show popular Auction

User Friendly

Find Item by keyword

Find Market

Keyword recommendation

Self-Purification

Student ID Verification

Review Recommendation Algorithm

Security

User Permission System

Object Owner System

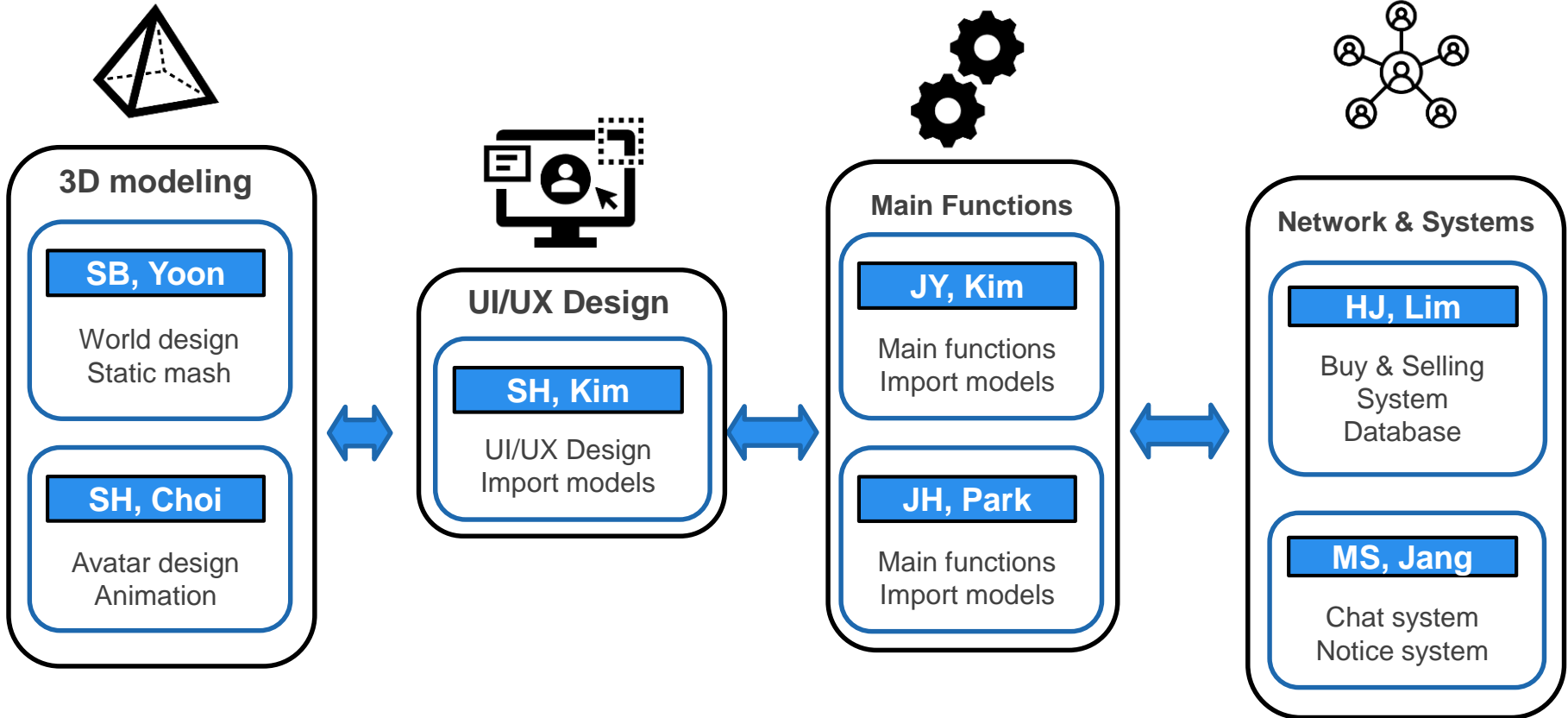
Review Integrity



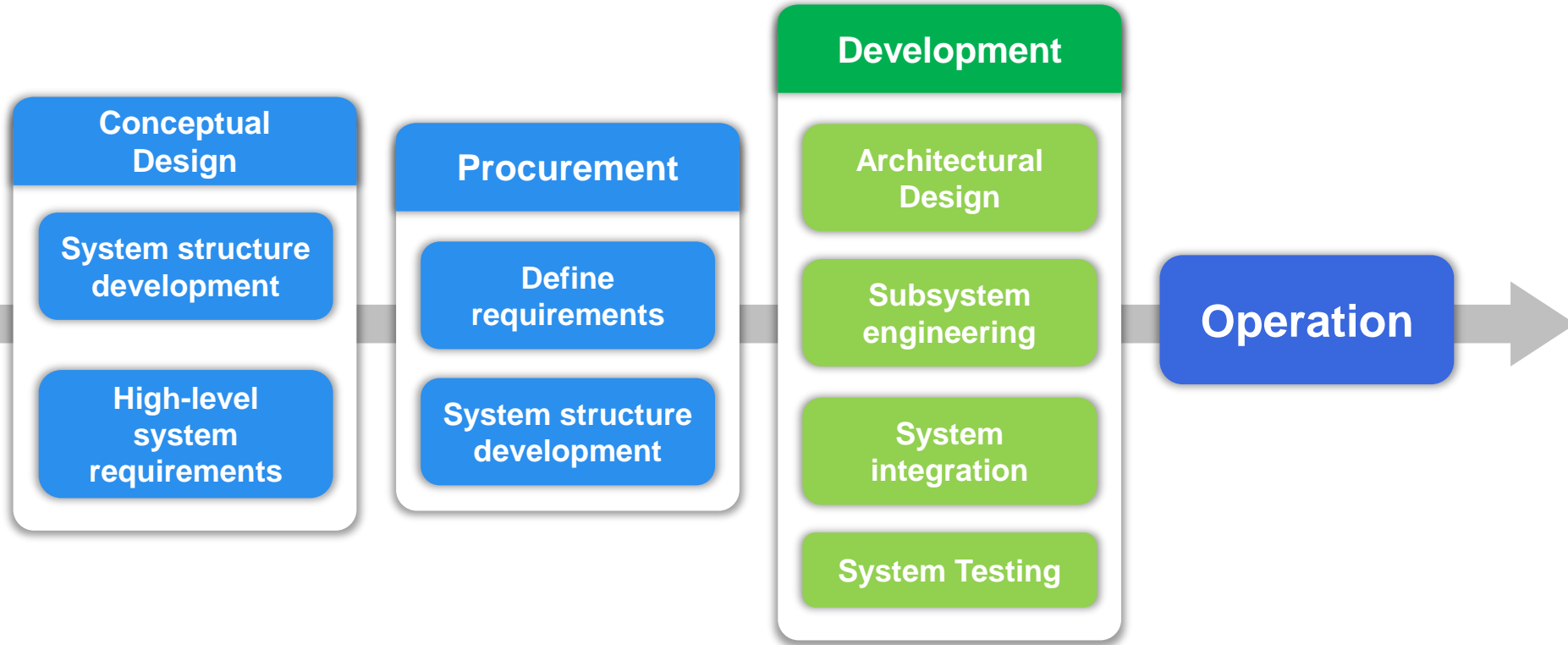
Team & Strategy

Our Team

Who are we?



Strategy



Development



**Architectural
Design**

Identifying components,
such as 3d modeling, networking, 3d model animation

**Subsystem
engineering**

Use unity or blender with VRchat SDK to develop the components

**System
integration**

Merge the 3d models, networking systems

System Testing

Upload to the vrchat and test them.

System Testing



Performance

Model loading

Buy & Sell speed

Chat



HCI - it is easy ?

to use the UI/UX

to find the
functionalities

to understand



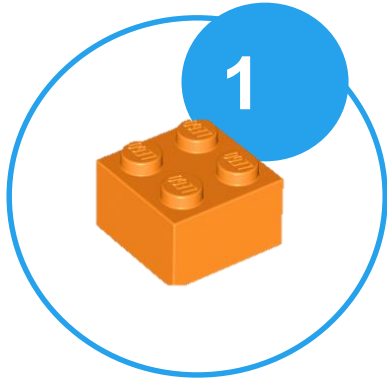
Safety, Reliability

Use only allowed
command

Accept only
allowed rights

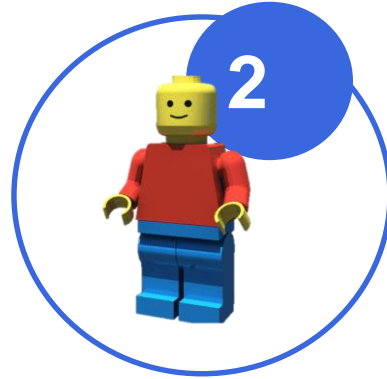
Check
The System
scalability

Demonstration process



Unit testing

- Is it possible to move avatars?
- Does the purchase/sales function work well?
- Does the auction function work well?



Integration Testing

- Can avatars travel freely in the metaverse world?
- Does purchasing/selling mutually affect each other's results?
- Does auction activity work well together?



System Testing

- Can avatars move freely and use functions such as purchase, sale, and auction?



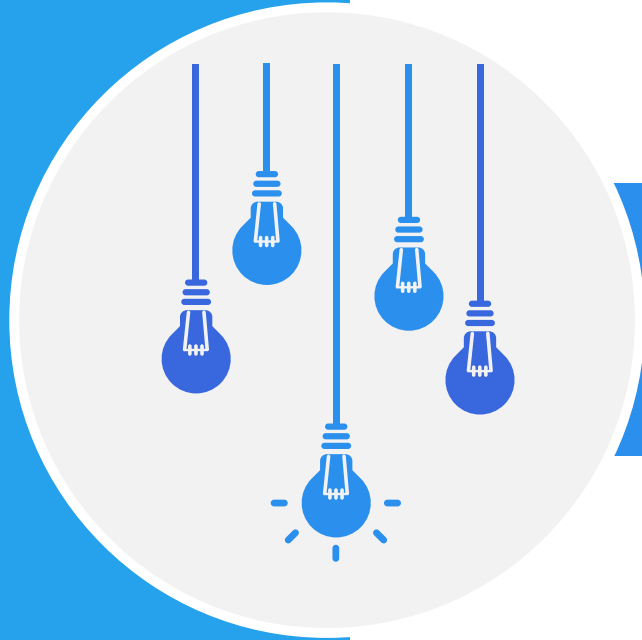
User Acceptance Testing

- Is there any inconvenience in moving avatars?
- Is there any inconvenience for users to use purchase, sale, or auction functions?

Quantitative evaluation of Goals



Quantitative evaluation of Goals			
Evaluation Indicator		Quantitative	Importance
1	Whether the purchase/sales results apply well to the buyer/seller	95% ↑	20%
2	User evaluation of avatar & world design	80% ↑	5% ↑
3	Purchase/Sales/Auction Speed	5 sec ↓	20% ↑
4	easy for users to use	95% ↑	20% ↑
5	Accessibility that allows users to use only permitted functions	90% ↑	10% ↑
6	Expert verification	90% ↑	25% ↑



Plan & Effect

Effect



01

Education

- ✓ Sharing e-books, notes, tools
- ✓ Sharing learnings, thoughts, talent



02

Technical

- ✓ Suggestions of platform of school flea market system
- ✓ Metaverse of Smart Campus



03

Social

- ✓ Promoting communication of students
 - ✓ Improving quality of students' life
 - ✓ Promoting students' convenience



04

Economical

- ✓ Available at affordable price
- ✓ Eco-friendly : Recycling

Timeline



	Contents		Timeline							
			~9/26	9/27~ 10/10	10/11~ 10/24	10/25~ 11/7	11/8~ 11/21	11/22~ 12/3	12/4~ 12/19	12/19~
1	Requirement Specification									
2	Design	Architecture								
3		Define Class								
4	Implement	Component								
5	Integration									
6	Code Review									
7	Testing									
8	Prepare Final Presentation									
Text Here			Text Here		Text Here		Text Here		Text Here	

Our Services

What is Benefits?



Smart Campus + Metaverse

- ✓ Students can enjoy campus life without having to come to school in person
- ✓ Overcome spatial/temporal limitations in COVID-19



Flea Market

- ✓ Everyone can come and enjoy!
- ✓ Flea market is familiar with everyone!
- ✓ Flea market + Metaverse is unique, funny and eye-catching to students
- ✓ Encouraging active participation of students.



Strong Integration with other projects

- ✓ Our flea market item can be combined at various events such as campus festival, school events and library.





Metaverse Campus SKKU Flea Market System

THANK YOU