



# Umart

## University Marketplace Platform

Group 7

Yuan Ma, Yuan-Shan Hsieh, Ting-Jui Hsu,  
Pei-Chang Huang, Jo-Yu Liao

Dec. 5, 2022



VIRGINIA TECH™

# Contents

1. What's Umart
2. How we build Umart
3. Umart demo
4. Lessons learned and reflections

# What's Umart

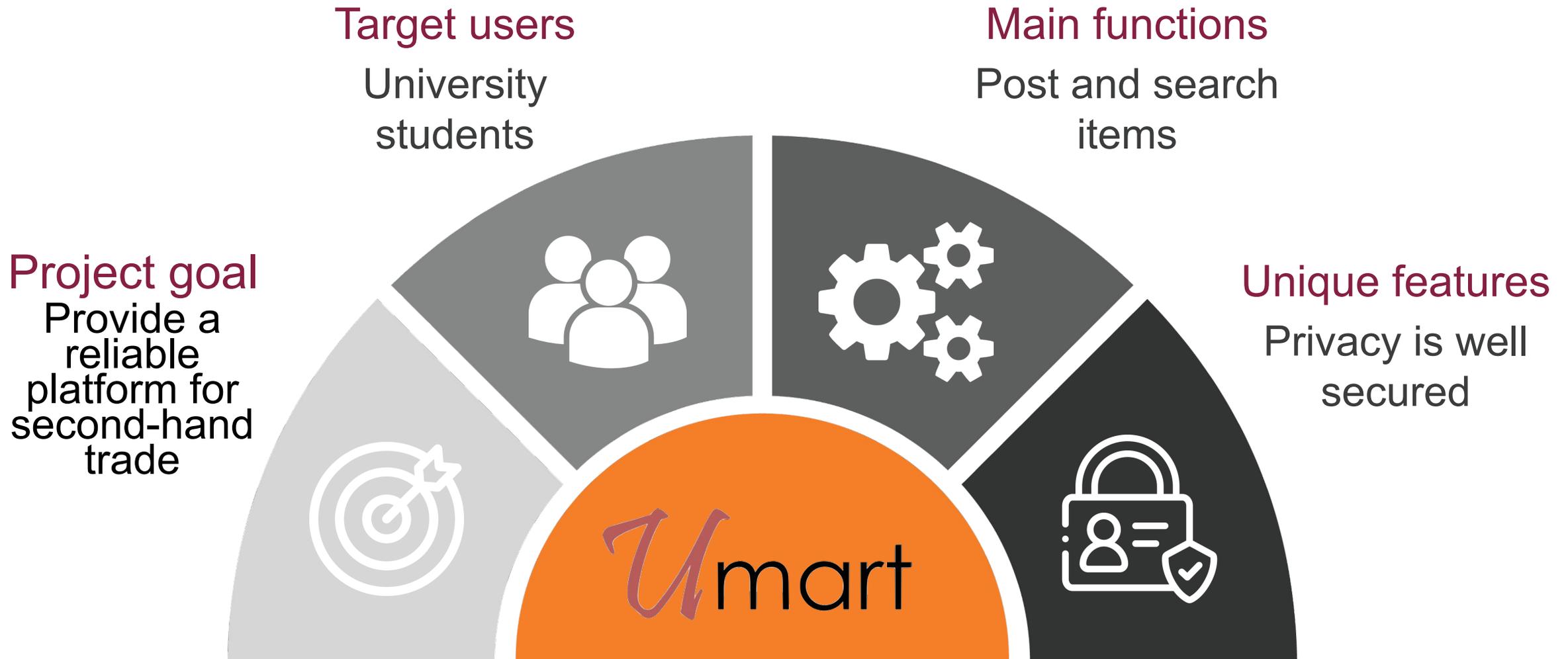


Umart is a second-hand trading platform for students

A easy-to-use and reliable platform for students to trade their items with nearby university students

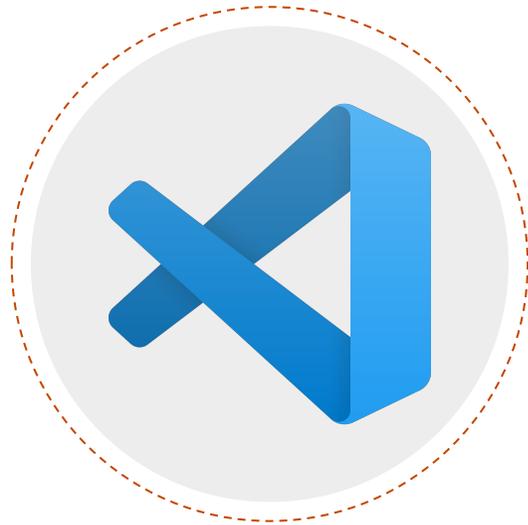
The logo for Umart, featuring a stylized red 'U' followed by the word 'mart' in a black, sans-serif font.

# What's Umart



# How we build Umart

# IDEs and Tools



VSCode

Software Development



GitLab

Version Control and CI/CD



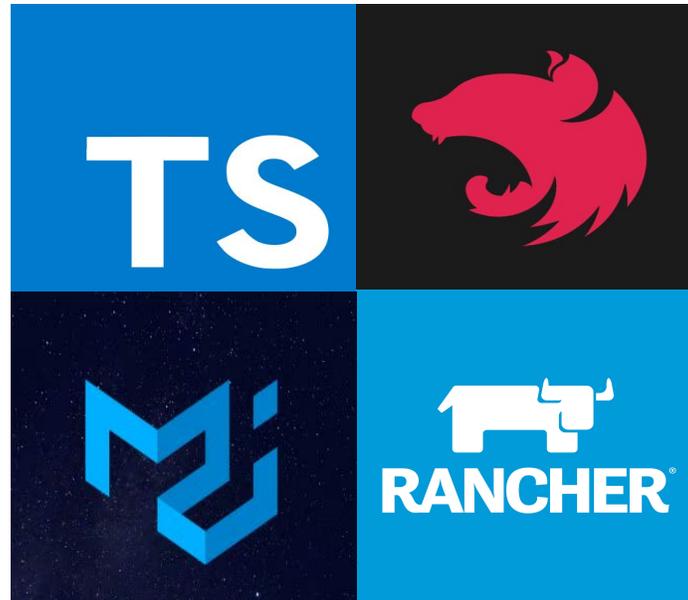
Jira

Project Management

# Technical details / Design Choices

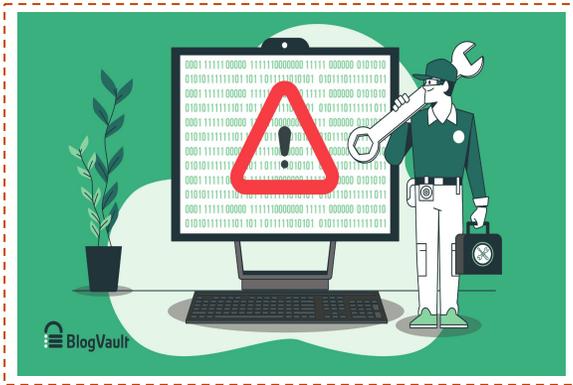
1 / Language

2 / Framework



3 / Design

4 / Deployment



## Difficulties

1. **CI/CD:** Time-consuming and has Single Point-of Failure
2. **Deployment:** Challenging to deploy
3. **Authentication (AuthN):** Hard to ensure user's identity
4. **Search:** Difficult to provide precise results

## Overcome

1. **CI/CD:** Virginia Tech Kubernetes (Rancher)
2. **Deployment:** Docker hub and Rancher
3. **AuthN:** Google single sign-in (SSO) and cron job
4. **Search:** Elasticlunr



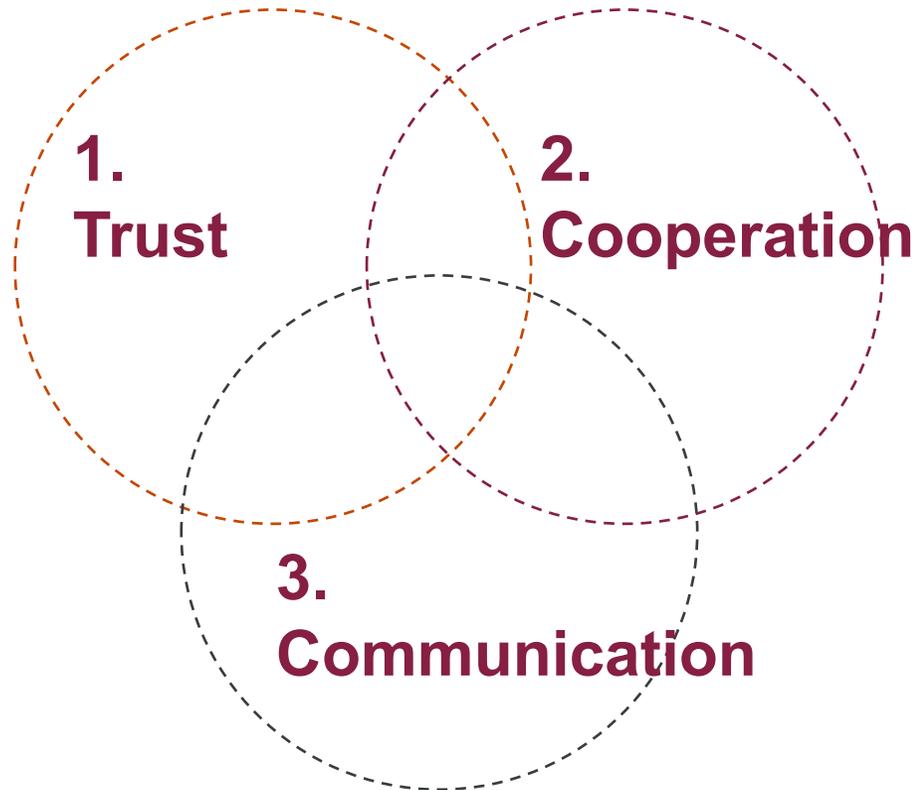
# Demo

*U*mart

# Lessons learned and reflections

## Reflection and retrospect

Overall, we are satisfy with what we have achieved

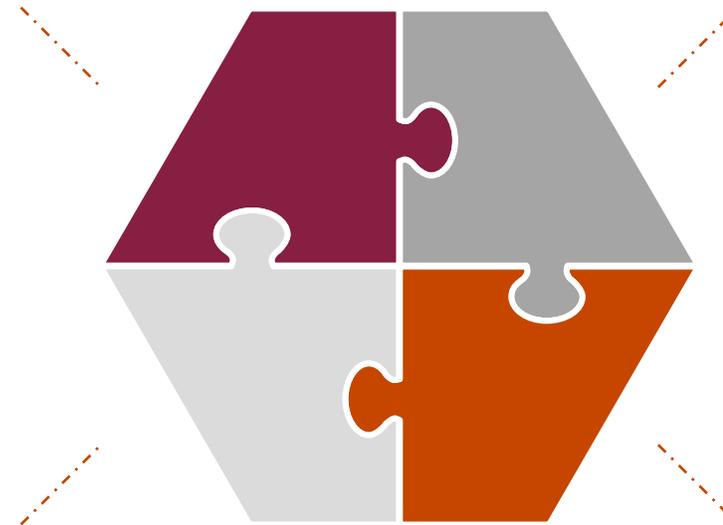


## Future directions and improvements

Besides from enhancing our current feature and infrastructure, some potential directions might be more administrative

1 / Launch service with other schools

2 / Feature enhancement



4 / Infrastructure improvements

3 / Provide more privacy options



# Q & A

Thank You