Campus Exchange
A Second-hand Trading App

CS673 Software Engineering Iteration 0

Team2: Scrumble Bug

Date: Sep 26 2024

Team Building

Srujana N
QA Leader

Yueyihan Qi
Security Leader

Yingtong Zhou
Team Leader

Yuanbin Man
Requirement Leader

Ang Li
Design and
Implementation Leader

HungHsu Chen
Configuration Leader

Project Vision

Goal

Create a peer-to-peer platform for BU students to buy and sell used items within their campus.

Target Audience

Boston University students, including both buyers and sellers.

Problem Statement

Students have used items they no longer need, but current marketplace apps are either too broad or unsafe for campus use.

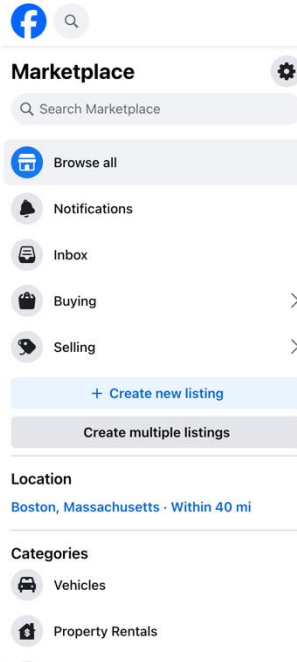# Competitor Analysis

Facebook Marketplace
A peer-to-peer platform that provides second-hand product transactions and offline services.

Limitations
- Unrelated search results (too broad)
- Unrelated recommendations
- Lack of comments on listings

How is Campus Exchange different from Facebook Marketplace?
- AI-powered search, results are related to BU students
- Include comments on product listings that enhances UX
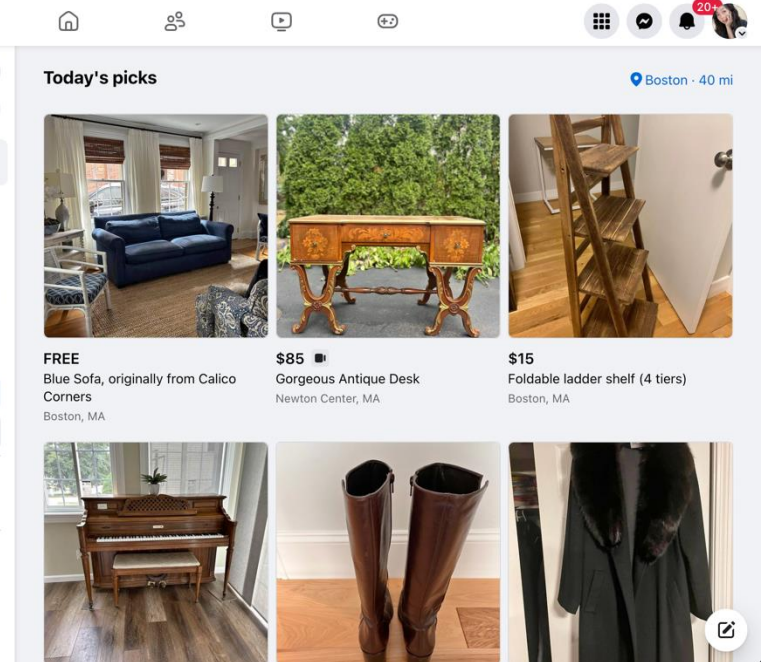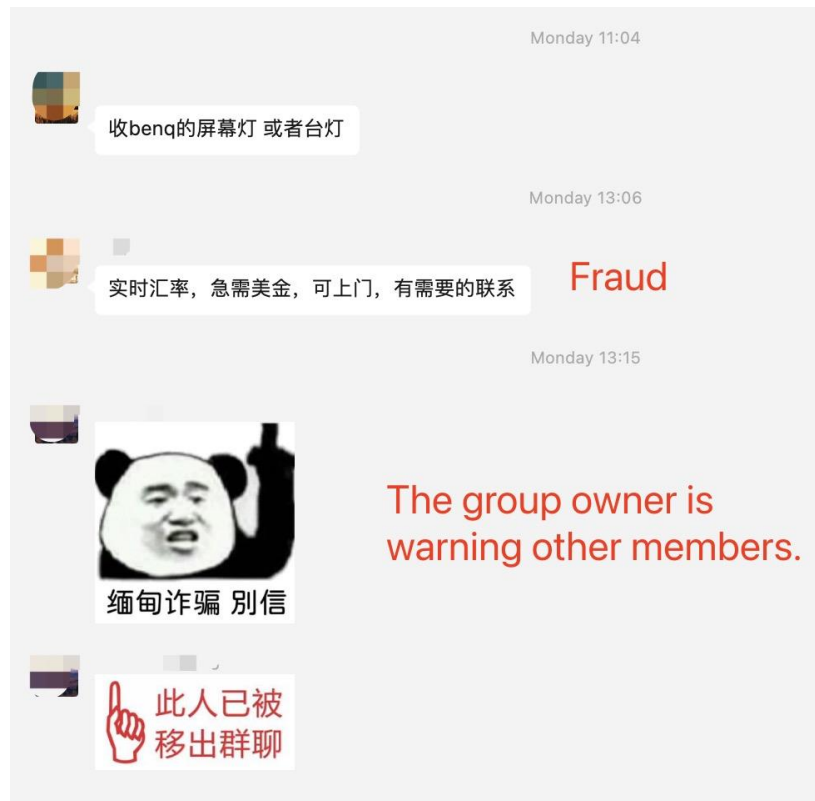
Competitor Analysis

WeChat Group
Groups of strangers posting unused items.

Limitations
- Spam and fake listings
- No search and filter functions

How is Campus Exchange different from WeChat Group?
- Secure user registration/authentication
- Large-scale database and cache system for fast data access

Monday 11:04

收benq的屏幕灯 或者台灯

Monday 13:06

实时汇率，急需美金，可上门，有需要的联系   Fraud

Monday 13:15

缅甸诈骗 别信   The group owner is warning other members.

此人已被移出群聊

Milestones and Iteration Plan

Iteration 1 – Oct 17 2024
- MVP Development (user registration, item listing, comments)
- Stable database and cache system configuration

Iteration 2 – Nov 7 2024
- Enhanced Features (chat, geolocation, AI search and recommend)
- QA plan and continuous testing

Iteration 3 – Dec 5 2024
- Post-launch feedback collection from students

Product Prototype

Login: (and Register) ①

Profile: (*Publish/Offline/Buy/Sell*) ②

Deliver Address: ③

Publish Item ④

Message Center (From Buyer): ⑤

Recommender System: ⑥

BU Second-hand · Search... · + Publish you Item/Announcement · Message · yuanbin

Advertisement

Dorm must-haves under $10

All · Digital · Essentials · Sports · Books · Announcement

Macbook Pro
For study and you life
$ 500   Yuanbin
2024-09-01 12:00:01

Macbook Air
For study and you life
$ 100   Yuanbin
2024-09-01 12:00:01

iPhone 15 Pro
For study and you life
$ 30   Yuanbin
2024-09-01 12:00:01

Desk
For study and you life
$ 5   Yuanbin
2024-09-01 12:00:01

Macbook Pro
For study and you life
$ 500   Yuanbin
2024-09-01 12:00:01

Macbook Air
For study and you life
$ 100   Yuanbin
2024-09-01 12:00:01

iPhone 15 Pro
For study and you life
$ 30   Yuanbin
2024-09-01 12:00:01

Desk
For study and you life
$ 5   Yuanbin
2024-09-01 12:00:01

You May Interested:
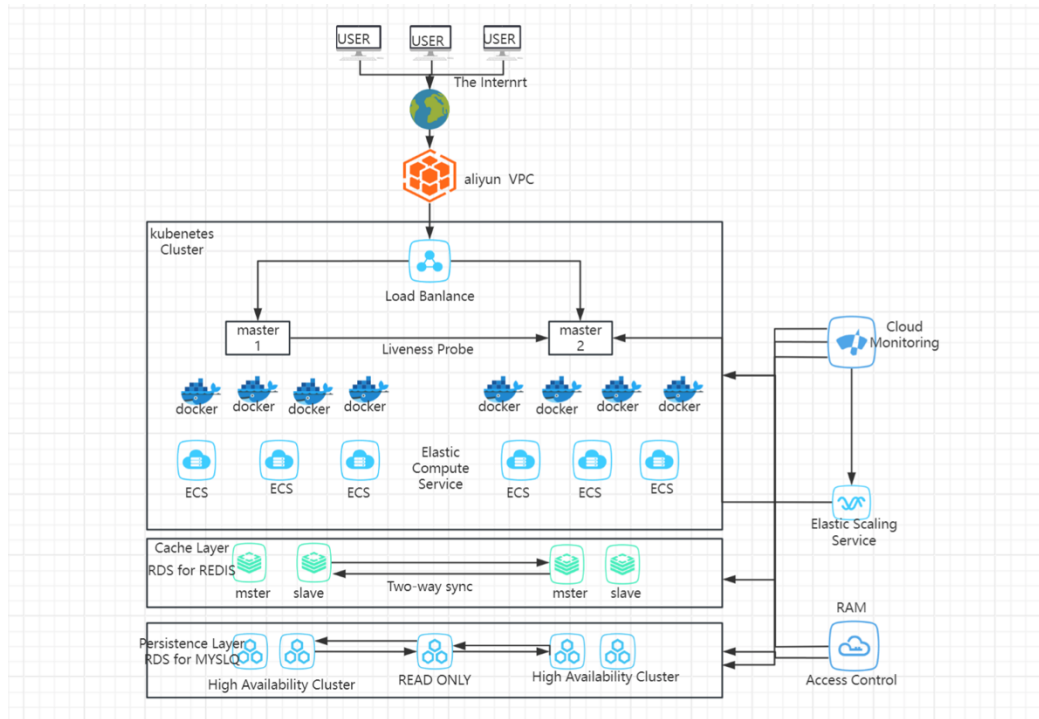
Cloud-Based Infrastructure

Alibaba Kubenetes

Build service architecture

Redis

Distributed database for fast data access

RDS for MySQL

Automatic backups, failure recovery

Tech Stack

Frontend **Vue.js**	**Backend** **Sprint Boot MyBatis**	**Database** **MySQL**	**AI** **LLaMA**
DevOps/CI/CD **Docker** **Kubernetes**	**Middleware** **Kafka**	**QA Testing** **PTS** **Jenkins**	**Caching** **Redis**

Development Methodology
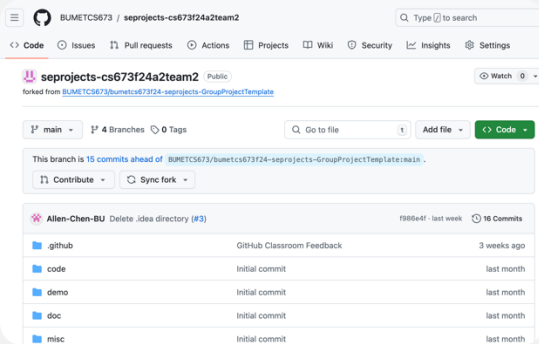

Agile Development
Scrum
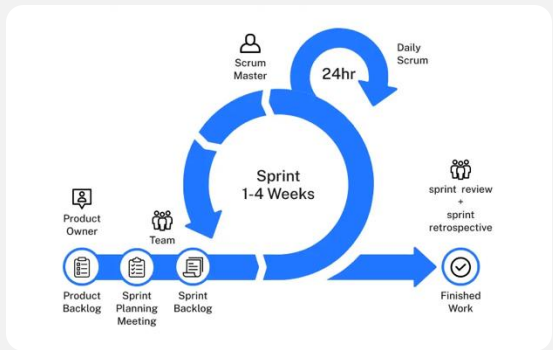
Task Management
Jira
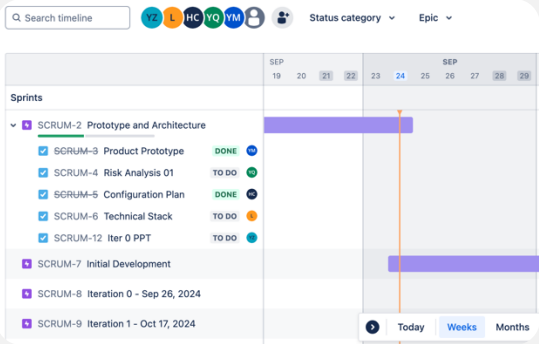
Version Control
GitHub

Risk Management

Communication
- Culture and language
- Proper documentation and weekly scrum meeting

Technical Risks
- Scalability, Data flexibility, System stability
- PTS, unit tests, integration tests, GitHub Action Tester and user test

Safety Risks
- Personal data
- User authentication

Thank you!