

# Korea Advanced Institute of Science and Technology



**School of Computing**

**CS350 - Introduction to Software Engineering**

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## **TRAD'M Application - Software Design Description**

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### **Team 7**

Members:

- Kern Fowler - 20196550
- Nabila Sindi - 20180744
- Mohammed Almaazmi - 20170850
- Zihan Qi - 20196362

Project Supervisors:

- Doo-Hwan Bae
- Sumin Park (Teaching Assistant)
- Sangwon Hyun (Teaching Assistant)

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## 1 - System Overview

### 1.1 -

Trad'M is a flea market mobile phone application for Android created to aid foreign students studying in Korea. Its purpose is to bring buyers and sellers of a wide variety of goods and services together by creating a marketplace where sellers can create offers for the goods and services they wish to sell, and buyers can search this marketplace for goods and services they are looking for. Once a buyer has found an offer he wishes to buy, he then waits for the seller to finalize the agreement, afterwhich, both parties can meet up to exchange the good/service being sold for the payment. Users, however, must create an account to be able to use the application

### 1.2 - Requirements

Functional requirements		
R.ID	Requirement Description	Dependencies/Assumptions

R.F.1	Users can create an account using their student IDs	Access to student ID database and a user details database
R.F.2	Users can login using their credentials	-
R.F.3	User credentials are authenticated during login	Access to user details database
R.F.4	Market with all currently available offers should be accessible by all logged in users	Access to offer marketplace database
R.F.5	Users can create new offers and edit their existing offers	Access to offer marketplace database
R.F.6	Users can search marketplace for specific offers by inputting certain criteria	Access to offer marketplace database
R.F.7	Users can propose to purchase an offer on display in the market	Access to offer marketplace database
R.F.8	Sellers can finalize the purchase of an offer after a buyer proposes to buy it	Access to offer marketplace database
<b>Non-functional requirements</b>		
R.ID	Requirement Description	
R.N.1	App should be simple and easy to use	
R.N.2	App should be clear and responsive	
R.N.3	App response time should not exceed 3s	
R.N.4	App should be available on Play Store across all Android devices	

R.N.5	App should have proper documentation to aid users and developers alike
R.N.6	App will only work with Wi-Fi or mobile networks not offline
R.N.7	App should support some form of traceability allowing users to go back to past actions
R.N.8	App will use device's default keyboard and screen for input and output
R.N.9	User access should be limited to offers and his/her user data
R.N.10	App should restart if a critical error occurs

### 1.3 - Tasks

## 2 - System Design

### 2.1 - System Architecture

### 2.2 - Class Diagram

### 2.3 - User Interface Design

### 2.4 - Use Case Diagram & Description (Refined)

### 2.5 - Sequence Diagram (Refined)

## 3 - Open-source ALM

## 4 - Acknowledgements

### 4.1 - Kern Fowler

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### 4.2 - Nabila Sindi

### 4.3 - Mohamed Almaazmi

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## 4.4 - Zihan Qi

## 4.5 - Editor

This document was formatted and edited by Kern Fowler.

## 4.6 - References

No reference material was used in the creation of this document.

## 4.7 - GitHub

This document is to coincide with work done on the following GitHub project - [https://github.com/el17kjt/CS350\\_Group\\_7.git](https://github.com/el17kjt/CS350_Group_7.git). More information about this project and its code can be found there, as well as updates and change logs of the report.

Jobs:

Title Page - K

System Overview - M

System Design

A. System Architecture - K

B. Class Diagram - K

C. User Interface Design (Mockup design) - N

D. (Refined) Use Case Diagram & Description Refine your use case diagram (1 diagram) - Q  
+ M

E. (Refined) Sequence Diagram - Q

4. Open-source ALM (Application Lifecycle Management) - N

5. Acknowledgement - ALL