TStore - Requirements Document

Project Name

The Store(TStore)

Team 5 Members

Jack Baxter

Shengrui Chen

Austin Pham

Hao Nguyen

Ryan Sheehan

1. **Introduction**
   1. **Purpose of document**

This document is written for the purpose of clarifying software requirements, arranging project planning, and organizing software development and testing, for reference by designers, developers, testers, and maintainers.

* 1. **Background of project**

Since the outbreak of COVID-19, more and more people have been infected with this virus. In order to reduce the number of people going out, our team decided to implement an online C2C platform that allows people to buy all kinds of items they need without going out.

* 1. **Reference**
* Spring Boot: <https://spring.io/projects/spring-boot>
* Vishal Layka, Learn Java for Web Development: Modern Java Web Development
* Bogunuva Mohanram Balachandar, RESTful Java Web Services
* Jeffrey A. Hoffer, Ramesh, Venkataraman Heikki Topi, Modern database ManageMent
  1. **Glossary**
* C2C: Customer to customer (C2C) is a business model that enables customers to trade with each other, frequently in an online environment.

1. **Project Overview**

TStore is an online c2c platform that allows members to sell or buy products.

**2.1 Functional Requirements**

According to the types of users, the website is mainly divided into two major functions: selling products and buying products.

2.1.1 Selling

* Allow users to sell their produce
* Allow users to adjust the items they sell, such as increasing inventory, discount promotion, etc.
* Allow users to query sales history
  + 1. Buying
* Allow users to purchase products
* Allow users to add items to the shopping cart
* Allow users to rate their purchased products
* Allow users to view their purchase history

In order to achieve these functions, the website needs at least the following pages, home page use for display, user registration and login page, shopping cart page, user purchase/sale history page, seller adjustment product page, and buyer rate page.

* Home page: Mainly used to display products sold by users, and provide a link so that users can easily log in or register.
* User registration/login page: Conveniently provide registration or login functions to users.
* Shopping cart page: This page mainly displays the products added by the user into the shopping cart. Users can perform operations on the products in their shopping cart, such as deleting products and modifying the quantity.
* User purchase/sale history page: Show the history of user purchases or sales.
* Seller adjustment product page: Display the products that the user is selling, and allow users to modify the content of the product.
* Buyer rate page: Buyers can evaluate the products they have purchased.

1. **Performance requirements**
   1. Precision

As the price is involved, all amounts must be accurate to the cents.

* 1. Server response

As an online transaction platform, the website's response time, update processing time, data conversion, and others must be within the normal response time.

* 1. Security

Ensure the security of user information and prevent the exposure of user information.

1. **Other requirements**
   1. User Interface

The purpose of designing this platform is to facilitate people to trade with each other, so the user interface should be simple and convenient, similar to other trading platforms, and customers can know how to operate without relearning.

* 1. Software design

In order to facilitate development and later upgrades, a three-tier architecture model should be adopted in the overall system architecture. The presentation layer will display user data and interact with users, the business layer will be responsible for processing business logic, and the data layer will store and retrieve data.