

AnyChange	
Design	Date: 21/05/2023

**IMTSquare Company**

**AnyChange Software**

**Design**  
**v3.0**

AnyChange	
Design	Date: 21/05/2023

### Revision History

Date	Version	Type	Description	Prepared by	Checked by
21/05/2023	3.0	IFC	Preliminary draft	IMT2 Dev	IMT2 QA/QC

AnyChange	
Design	Date: 21/05/2023

## AnyChange Design

### 1 Introduction

This document presents the software design of AnyChange. This is the project document that documents the design decisions, design artifacts and diagrams that represent the working mechanism of the software.

### 2 Design Structure

Design of AnyChange follows a Model-View-Controller(MVC) architecture. Model layer represents the entities that are persistent across the application, controller layer is responsible for running the business logic of the application by using the model entities and view layer represents the user interface.

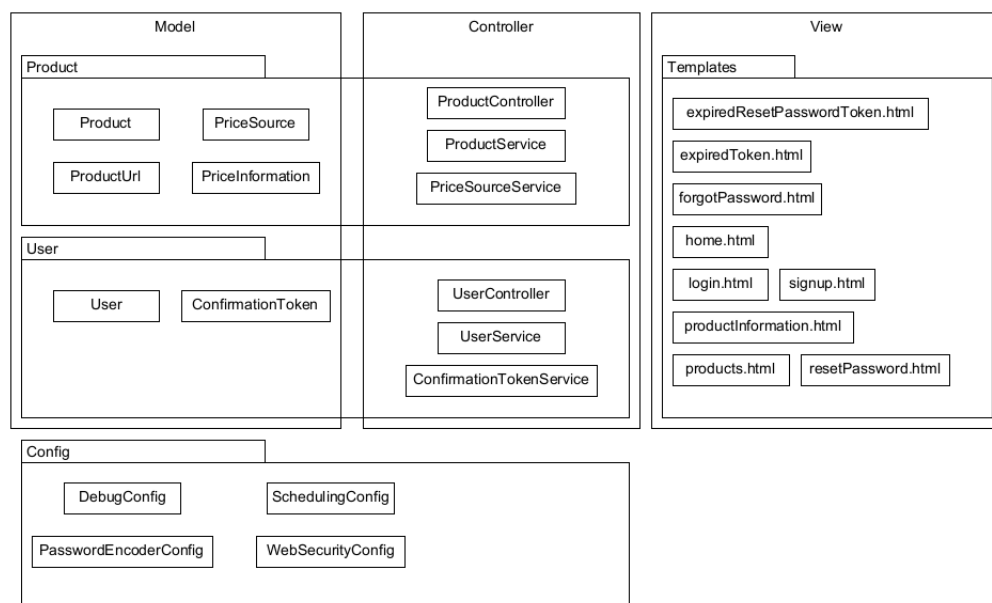


Figure 1. Package Diagram of AnyChange, highlighting Model-View-Controller structure

There are three types of users available: admin, seller and standard user. Admin user is responsible for general administration tasks. Seller users can add new products to the system and remove products they have added. Standard users can search for products which they can add to the monitoring list to be notified during price changes.

AnyChange	
Design	Date: 21/05/2023

### 3 Subsystems

There are 4 packages that make up AnyChange.

#### a. User

This package is responsible for the user management logic. It enables registration, confirmation of user activities and authentication.



Figure 2. Class diagram of User package



AnyChange	
Design	Date: 21/05/2023

### c. Config

This package is responsible for application wide configurations that are enabled by Spring-Boot framework. It works by supplying configuration beans that extends existing configuration objects.

### d. Templates

This package contains Thymeleaf templates that are used for rendering user interface

## 4 Requirement Realizations

### a. UC1-Register to System

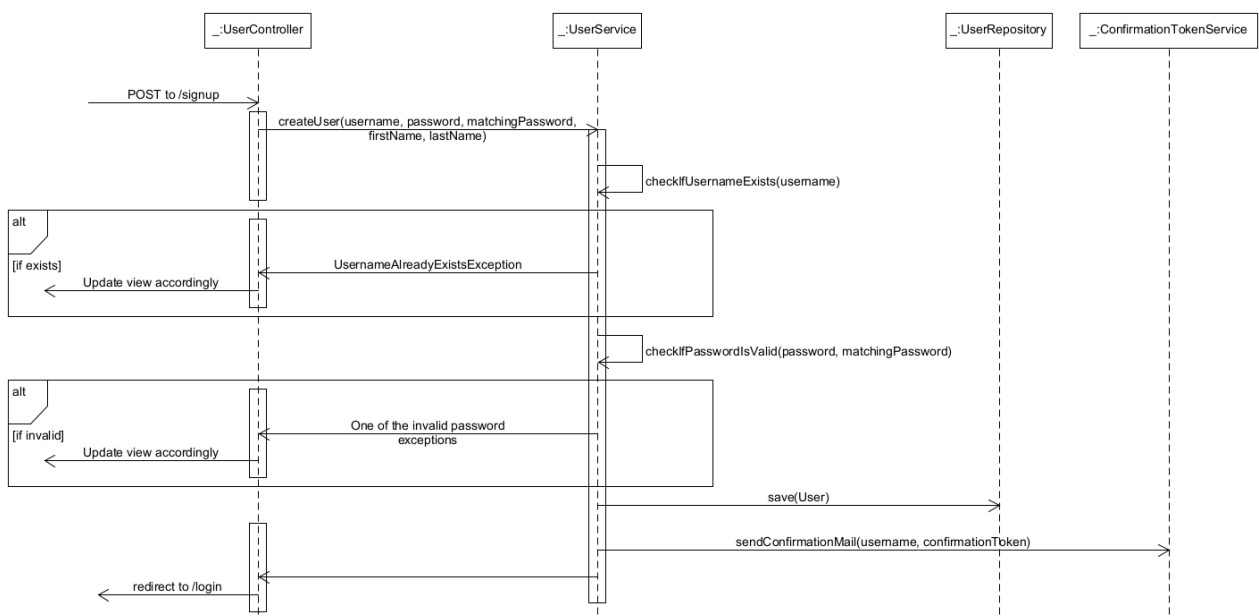


Figure 4. User Registration sequence diagram

AnyChange	
Design	Date: 21/05/2023

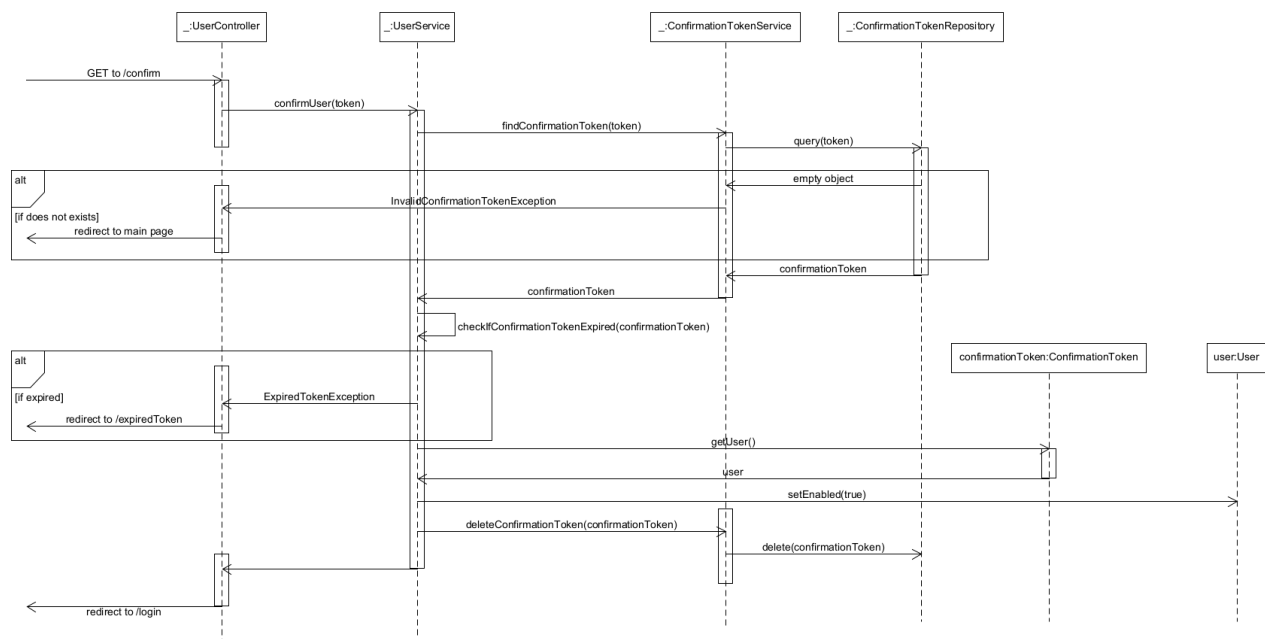


Figure 5. User Confirmation sequence diagram

## b. UC2-Login to System

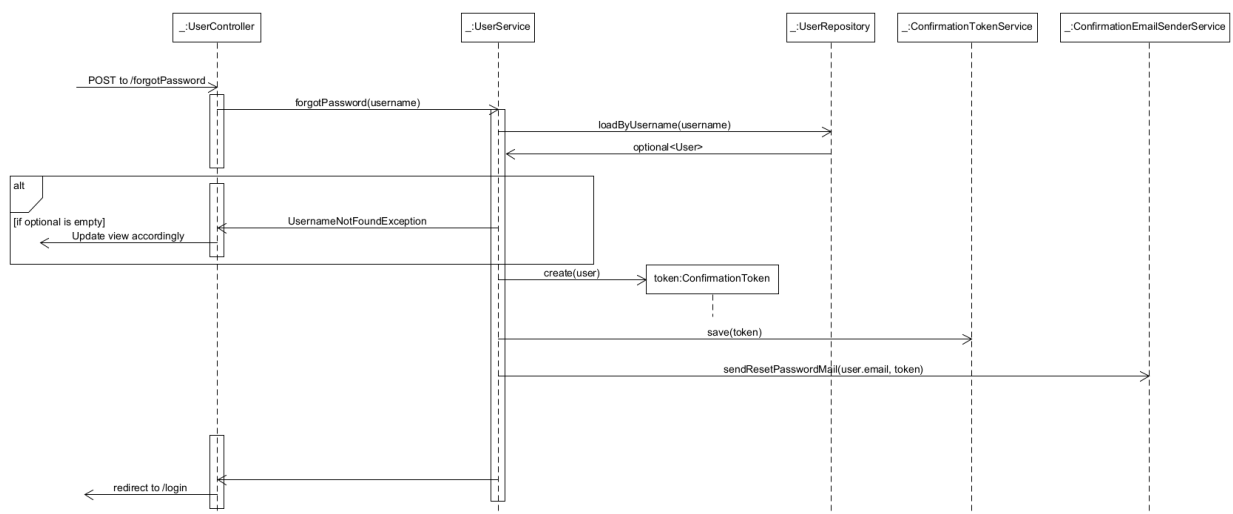


Figure 6. Forgot password sequence diagram

AnyChange	
Design	Date: 21/05/2023

### c. UC3-Manage Personal Information

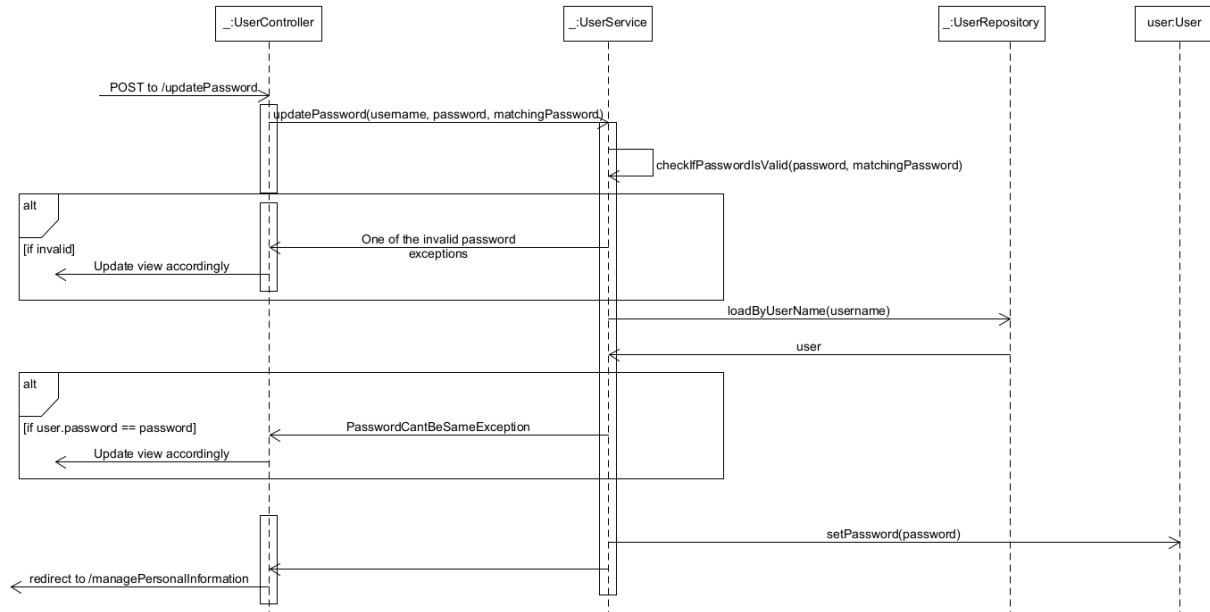


Figure 7. Update password sequence diagram

### d. UC4-Manage Payment Information

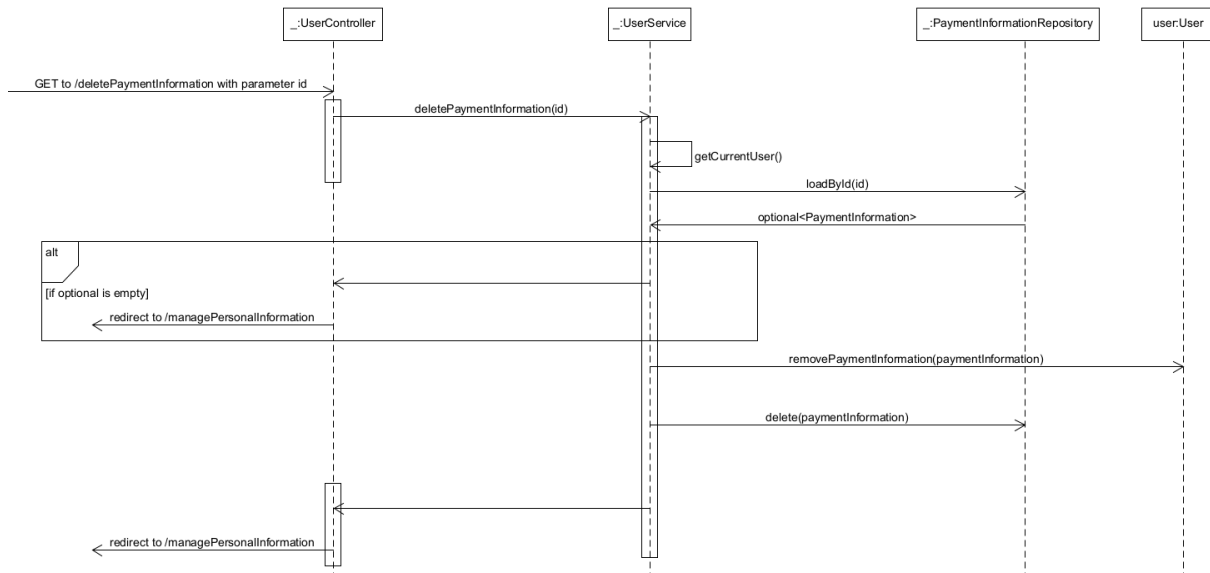


Figure 8. Delete payment information sequence diagram



AnyChange	
Design	Date: 21/05/2023

### e. UC5-Manage Account

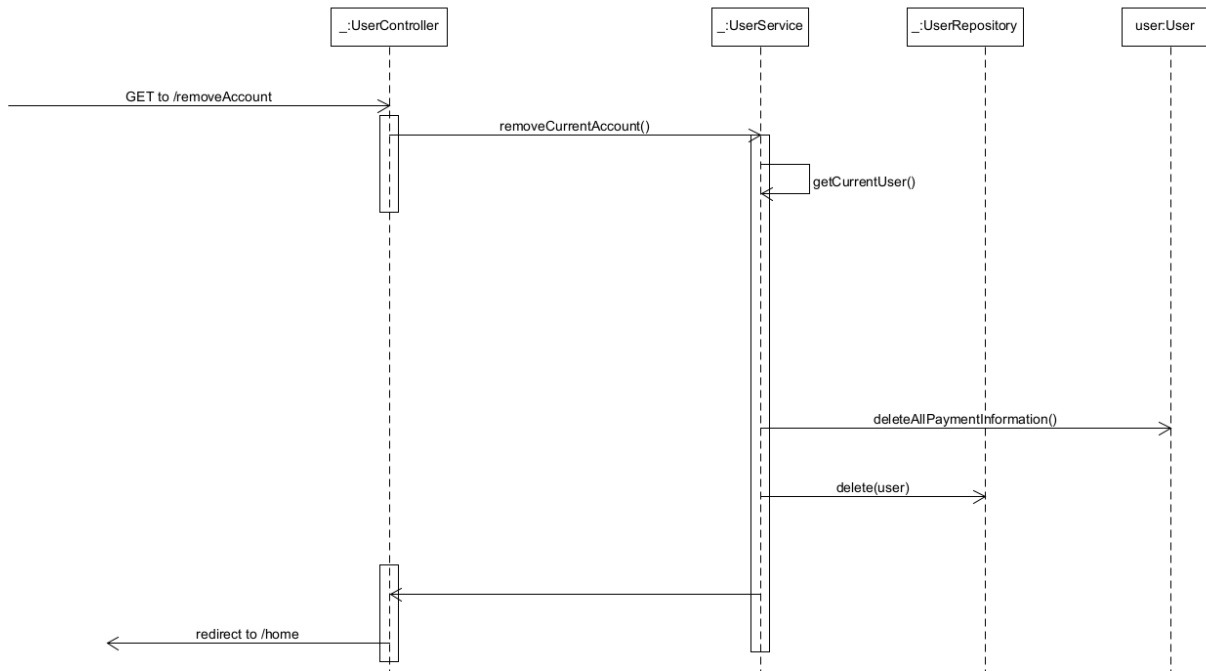


Figure 9. Remove account sequence diagram

### f. UC6-Manage Product

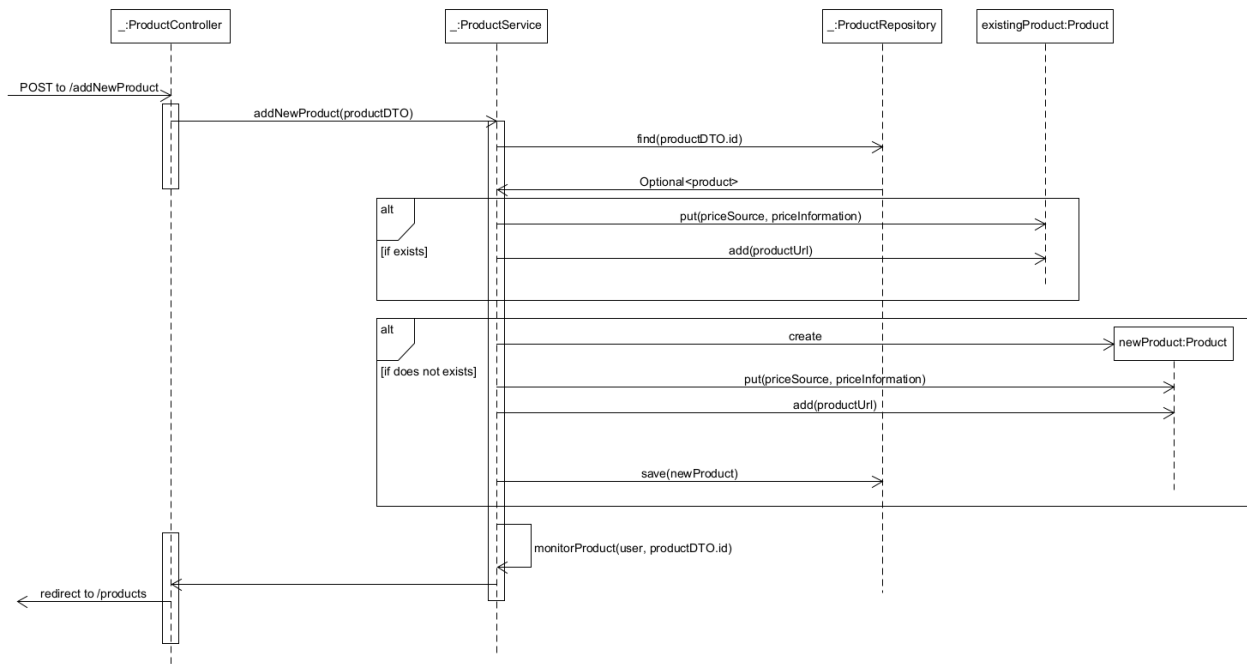


Figure 10. Add new product sequence diagram