



*Fitts*

내게 딱 맞는 핏을 찾다



# Fitts: Requirement Specification (Purpose: Reverse engineering)

Documented by:



**Team2**

Nguyen Khanh Binh	2019711305
Lim Gunsik	2019711699
Haziq Hamzah	2019711435
Jang Hanbin	

## Table of Contents

<b>1. Introduction .....</b>	<b>4</b>
<b>2. User Requirements Definition.....</b>	<b>5</b>
<b>2.1. Functional Requirements .....</b>	<b>5</b>
2.1.1. Sign-up/Sign-in .....	5
2.1.2. User Personalization manager .....	5
2.1.3. Homepage.....	5
2.1.4. Store manager .....	5
2.1.5. Review System.....	6
2.1.6. Notification System .....	6
2.1.7. Mypage .....	6
2.1.8. Cart.....	6
2.1.9. Payment System .....	6
2.1.10. Showroom.....	6
2.1.11. Fitts Point System .....	6
2.1.12. Search.....	6
2.1.13. Log-out .....	7
2.1.14. DB manager .....	7
<b>2.2. Non-Functional Requirements.....</b>	<b>7</b>
2.2.1. Product Requirements.....	7
2.2.2. Organizational Requirements.....	7
2.2.3. External Requirements .....	7
<b>3. System Requirements Specification .....</b>	<b>8</b>
<b>3.1. Functional Requirements – Frontend.....</b>	<b>8</b>
3.1.1. Sign-up .....	8
3.1.2. Sign-in .....	8
3.1.3. User Personalization Manager (Frontend).....	9
3.1.4. Homepage.....	9

3.1.5.	Store Manager (Frontend) .....	10
3.1.6.	Review System (Frontend) .....	10
3.1.7.	Notification System .....	10
3.1.8.	Mypage .....	11
3.1.9.	Cart.....	11
3.1.10.	Payment System (Frontend) .....	11
3.1.11.	Showroom.....	12
3.1.12.	Fitts Point System .....	12
3.1.13.	Search.....	13
3.1.14.	Log-out .....	13
3.2.	Functional Requirements – Backend.....	13
3.2.1.	User Personalization Manager .....	13
3.2.2.	Store Manager .....	14
3.2.3.	Review System.....	14
3.2.4.	Payment System .....	14
3.2.5.	DB Manager .....	15
3.3.	Non-Functional Requirements.....	15
3.3.1.	Product Requirements.....	15
3.3.2.	Organizational Requirements.....	16
3.3.3.	External Requirements .....	16
4.	System Architecture .....	17
4.1.	Frontend Diagram .....	17
4.2.	Backend Diagram.....	18
4.3.	Use-case Diagram .....	19

# 1.Introduction

This section briefly describes the target system including a description of the technical terms to be used in the future.

## 1.1. Background

Nowadays, due to the enormous growing of the internet and technologies, it enables people to do many things through their mobile phone, laptop, television, ... Online shopping mall appeared by the growing of both the fashions companies and internet. Mobile shopping mall application provide functions for users convenient shopping. Customers can check details of the product at their home, pay as they go and receive the product at their chosen place.

## 1.2. Fitts

While so many existing online shopping mall applications on application store, they are all the same with each other's. Because of that, some company choose to make the different by some minor changes. Fitts is one of those. The key idea of Fitts success is they using the users body information to suggest the items to users, and by that increase the revenue from each user.

## 2. User Requirements Definition

This section covers the definitions for the user requirements of the proposed system. The requirements can be categorized into functional and non-functional requirements.

### 2.1. Functional Requirements

The functional requirements include, but are not limited to, the following items:

#### 2.1.1. Sign-up/Sign-in

This is a basic requirement for a user to use the Fitts application. The requirement is as such:

- At first, users must sign-up an account of the Fitts system with ID, password, and e-mail, or users can create an account via Facebook or Kakao account.
- Users must Sign-in with their ID and Password.
- When users Sign-in, the system should authenticate the users by matching the given input with the user's account information in the DB.

#### 2.1.2. User Personalization manager

##### 2.1.2.1. Frontend

After logged-in, users must input the information about their bodies such as height, weight, body type, shoe size, and style of clothing.

##### 2.1.2.2. Backend

The user personalization manager must store the information in system DB.

#### 2.1.3. Homepage

Show up the posted reviews of other users, which is about the clothes that they bought with a direct link to buy the product. Must include today's famous posting, daily best product deals, a trend that is right with my bodies information, and other famous product that is not related to my bodies information.

#### 2.1.4. Store manager

##### 2.1.4.1. Frontend

Show up many products with the price available in the Fitts system and direct link to the shop that sells the products. Users can bookmark the product and the shop.

#### **2.1.4.2. Backend**

Write here

### **2.1.5. Review System**

#### **2.1.5.1. Frontend**

Users can upload reviews about outfits, shoes, bags using their creativity.

#### **2.1.5.2. Backend**

Write here.

### **2.1.6. Notification System**

Users should receive any notice about events, coupons, best deals, payment completions, shipping information and many more.

### **2.1.7. Mypage**

Mypage provides users with information related to ordering and activity. Users can check their orders and shipping information. From mypage, users can go to their showroom to view their posted reviews. It also provides a bookmark feature, event notification feeds, and friend invitation.

### **2.1.8. Cart**

All of the products to be bought by users are listed in the cart.

### **2.1.9. Payment System**

#### **2.1.9.1. Frontend**

Payment of products is linked with various payment methods such as credit card, master card, Kakao pay, Naver pay, and so on.

#### **2.1.9.2. Backend**

Write here.

### **2.1.10. Showroom**

The reviewed product by the users must be shown here as a kind of user's private blog.

### **2.1.11. Fitts Point System**

Fitts points can be viewed on mypage. This is the point earn from posting reviews about the product. Users can collect this point to buy coupons or products in Fitts store. Besides earn point from posting review, users can earn points by shopping, inviting peoples, and complete some events.

### **2.1.12. Search**

Users can search for other users, shop, or product in this area.

### **2.1.13. Log-out**

After users log-out, all application instances and services must be terminated with the user's device. Except for background service such as notification services.

### **2.1.14. DB manager**

Write here.

## **2.2. Non-Functional Requirements**

The non-functional requirements can be further classified into Product Requirements, Organizational Requirements, and External Requirements as follows:

### **2.2.1. Product Requirements**

#### **2.2.1.1. Performance**

- It needs the same performance as other e-commerce applications when users are shopping for products.
- It also needs a good system to upload and download the image for products. It needs to balance the network to make it fast enough when users are using certain services.
- The Fitts point must be stable and reliable throughout the application.

#### **2.2.1.2. Security**

A review must be reliable and must guarantee the anonymity of the reviewer. Each personal information must be protected from external access. ID and passwords should also be protected by any third-party access.

#### **2.2.1.3. Usability**

The UI of the application should be simple to provide important information at the tip of a finger. Tutorial of using application must be given when the user uses the application for the first time.

### **2.2.2. Organizational Requirements**

#### **2.2.2.1. N/A**

Write here

### **2.2.3. External Requirements**

#### **2.2.3.1. N/A**

Write here

# 3. System Requirements Specification

This chapter specifies the functional and non-functional requirements. We focus on the following detail requirements: Name, description, inputs, outputs, action, requirements, pre-condition and post-condition.

## 3.1. Functional Requirements – Frontend

### 3.1.1. Sign-up

<b>Name</b>	Sign-up
<b>Description</b>	Users can create their account
<b>Inputs</b>	{ID, password, user details}
<b>Outputs</b>	The account of the user is created
<b>Action</b>	When the user first opens the application, it requires the user to Sign-in or if the user does not have an account, the user must sign-up. When signing-up, user must input their desired ID and password. They also are required to input details about them
<b>Requirements</b>	The person with no account
<b>Pre-condition</b>	Users should have email, Facebook or Kakao account
<b>Post-condition</b>	N/A

**Table 1:** Sign-up

### 3.1.2. Sign-in

<b>Name</b>	Sign-in
<b>Description</b>	User can Sign-in to their account after signing-up or already have an account
<b>Inputs</b>	{ID, password}
<b>Outputs</b>	Homepage
<b>Action</b>	The user Sign-in with the account that was signed-up previously. After user is logged in to the application, the first-page instance that the user view is homepage.
<b>Requirements</b>	User must have the credential in the application system
<b>Pre-condition</b>	N/A



<b>Post-condition</b>	N/A
-----------------------	-----

**Table 2: Sign-in**

### 3.1.3. User Personalization Manager (Frontend)

<b>Name</b>	User personalization manager (frontend)
<b>Description</b>	Provide UI for the user to input the data related to user's body information
<b>Inputs</b>	{Body weight, height, shoe size, .....}
<b>Outputs</b>	User personalization manager sends the data to the DB manager for DB update
<b>Action</b>	The user opens the UI to input their body information. User input all the required inputs. The user personalization manager gets the input data and send to DB manager.
<b>Requirements</b>	User body information
<b>Pre-condition</b>	Input options must be provided by personalization manager
<b>Post-condition</b>	Input data must be sent to DB manager

**Table 3: User Personalization Manager (Frontend)**

### 3.1.4. Homepage

<b>Name</b>	Homepage
<b>Description</b>	Provide view of available products, shops, daily deals, and trends
<b>Inputs</b>	User body information
<b>Outputs</b>	The data related to products, shops, daily deals, and trend which relates to the user body information
<b>Action</b>	When user access homepage, it will automatically provide view of products, shops, daily deals, and trends which relates to the user body information
<b>Requirements</b>	User body information
<b>Pre-condition</b>	N/A

<b>Post-condition</b>	N/A
-----------------------	-----

**Table 4:** Homepage

### 3.1.5. Store Manager (Frontend)

<b>Name</b>	Store manager (frontend)
<b>Description</b>	Manage the view for products and shops
<b>Inputs</b>	User body information
<b>Outputs</b>	The data related to products and shops
<b>Action</b>	
<b>Requirements</b>	
<b>Pre-condition</b>	
<b>Post-condition</b>	N/A

**Table 5:** Store Manager (Frontend)

### 3.1.6. Review System (Frontend)

<b>Name</b>	Review system (frontend)
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	
<b>Pre-condition</b>	N/A.
<b>Post-condition</b>	N/A.

**Table 6:** Review System (Frontend)

### 3.1.7. Notification System

<b>Name</b>	Notification system
<b>Description</b>	

<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	
<b>Pre-condition</b>	
<b>Post-condition</b>	

**Table 7:** Notification system

### 3.1.8. Mypage

<b>Name</b>	Mypage
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	
<b>Pre-condition</b>	
<b>Post-condition</b>	N/A

**Table 8:** Shopping

### 3.1.9. Cart

<b>Name</b>	Cart
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 9:** Cart

### 3.1.10. Payment System (Frontend)

<b>Name</b>	Payment system (frontend)
-------------	---------------------------

<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 10: Payment System (Frontend)**

### 3.1.11.Showroom

<b>Name</b>	Showroom
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 11: Showroom**

### 3.1.12.Fitts Point System

<b>Name</b>	Fitts point system
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 12: Fitts Point System**

### 3.1.13.Search

<b>Name</b>	Search
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 13: Search**

### 3.1.14.Log-out

<b>Name</b>	Log-out
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 14: Log-out**

## 3.2. Functional Requirements – Backend

### 3.2.1. User Personalization Manager

<b>Name</b>	User personalization manager
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A

<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 15: User Personalization Manager**

### 3.2.2. Store Manager

<b>Name</b>	Store manager
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 16: Store Manager**

### 3.2.3. Review System

<b>Name</b>	Review system
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 17: Review System**

### 3.2.4. Payment System

<b>Name</b>	Payment system
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	

<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 18:** Payment System

### 3.2.5. DB Manager

<b>Name</b>	DB manager
<b>Description</b>	
<b>Inputs</b>	
<b>Outputs</b>	
<b>Action</b>	
<b>Requirements</b>	N/A
<b>Pre-condition</b>	N/A
<b>Post-condition</b>	N/A

**Table 19:** DB Manager

## 3.3. Non-Functional Requirements

### 3.3.1. Product Requirements

#### 3.3.1.1. Performance

- It needs the same performance as other e-commerce applications when users are shopping for products.
- It also needs a good system to upload and download the image for products. It needs to balance the network to make it fast enough when users are using certain services.
- The Fitts point must be stable and reliable throughout the application.

#### 3.3.1.2. Security

A review must be reliable and must guarantee the anonymity of the reviewer. Each personal information must be protected from external access. ID and passwords should also be protected by any third-party access.

#### **3.3.1.3. Usability**

The UI of the application should be simple to provide important information at the tip of a finger. Tutorial of using application must be given when the user uses the application for the first time.

#### **3.3.2. Organizational Requirements**

Write here

#### **3.3.3. External Requirements**

##### **3.3.3.1. Personal Information Protection**

The system collects and stores user information when they sign-up. Only some basic information of users must be gathered, and most of the personal information should be confidential from third-party viewers.

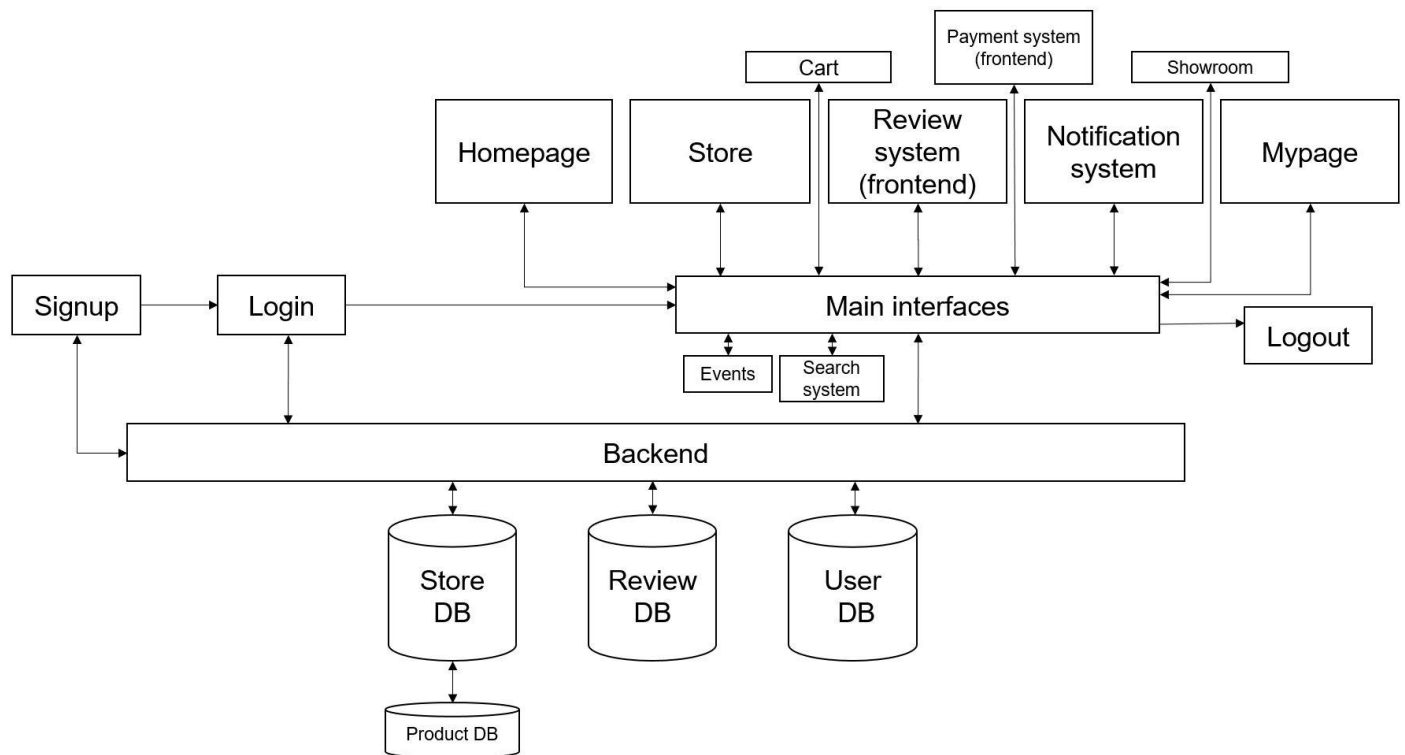
##### **3.3.3.2. External System Policy**

As this system provides information reprocessing of the review list of other systems, the system that prohibits unauthorized reproduction of data may violate the operation policy depending on the data collection method. Therefore, it is necessary to carefully check the operation policy of the information collection of the target system and collect data without violating the policy.

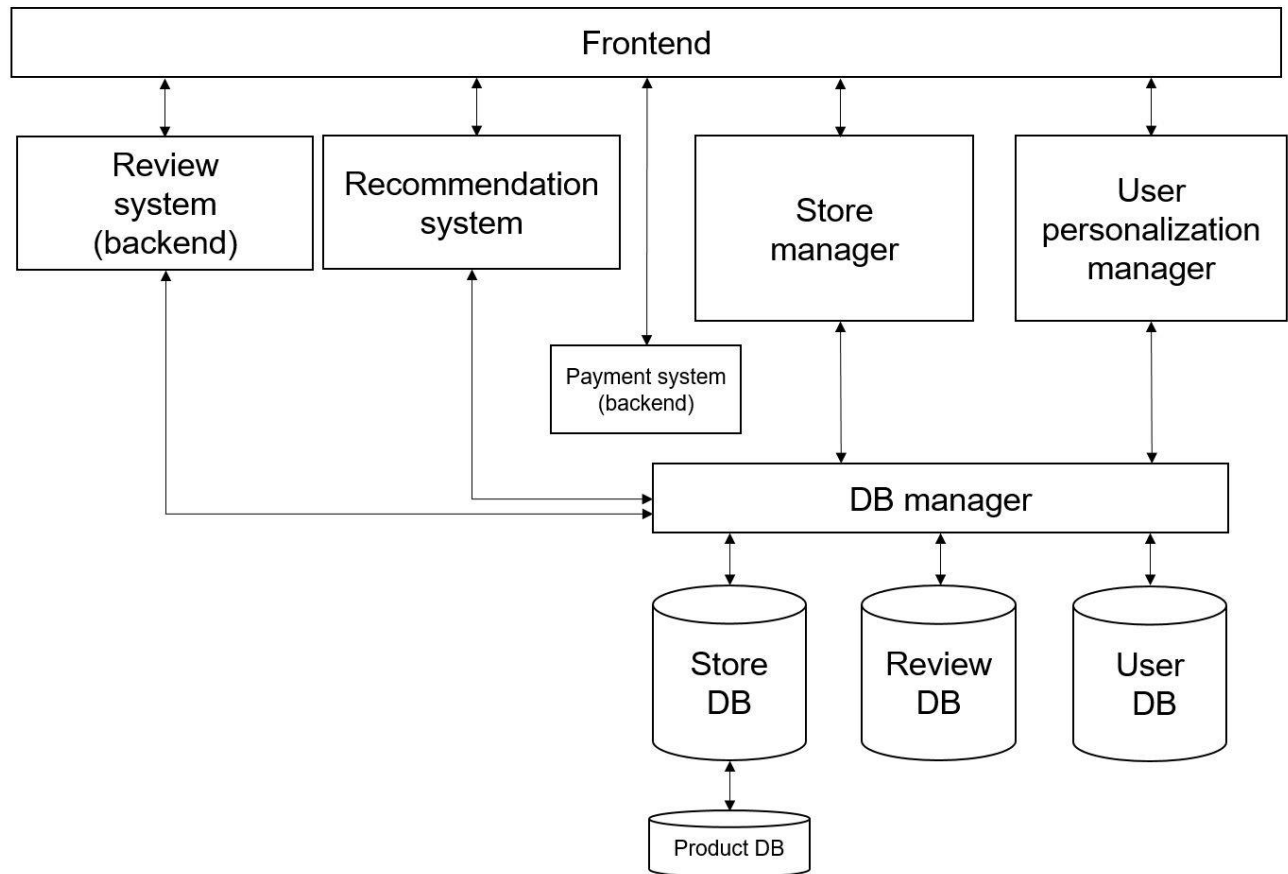


# 4. System Architecture

## 4.1. Frontend Diagram



## 4.2. Backend Diagram



## 4.3. Use-case Diagram

