



**UNIVERSIDAD DISTRITAL  
FRANCISCO JOSÉ DE CALDAS**

**PROJECT ADVANCE: APPLICATION FOR BUYING AND SELLING  
SECOND CLOTHES**

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Bogotá D.C. October, 2024

## **1. BUSINESS MODEL**

Secondhand Clothing Selling App Software is an e-commerce management system designed to make it easy to buy and sell secondhand clothing online. The software is designed to be used by people looking to buy or sell second-hand clothing safely and efficiently.

### **Software Objectives**

- Provide an online platform for users to buy and sell second-hand clothing safely and efficiently.
- Offer a variety of second-hand products so buyers can find what they are looking for.
- Facilitate the payment and shipping process so that buyers can receive their products quickly and safely.
- Provide an intuitive and easy-to-use user experience so users can navigate and find what they are looking for quickly and efficiently.
- Offer tools and resources so sellers can manage their products and sales effectively.
- Provide a security and privacy system to protect user information and their transactions.

### **Proposed Functionalities**

- User registration and authentication
- Posting of products by sellers
- Search and selection of products by buyers
- Secure payment and shipping process
- Reviews and ratings system for products and Sellers

## **2. USER STORIES**

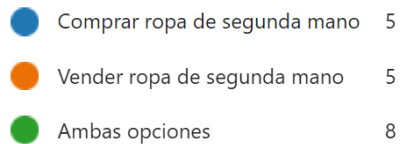
A survey was carried out on 20 potential users with the aim of knowing their preferences and needs when using a second-hand clothing sales application. The questions aimed to identify the main goals of the users, the desired features in the application, the way the products are displayed, the necessary information about the products and the importance of direct contact with other users.

The questions and their results were:

1. What is your main interest when using a virtual second-hand clothing application?

Options:

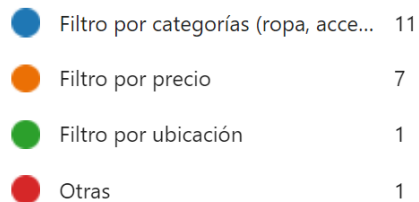
- Buy second-hand clothes
- Sell second-hand clothes
- Both options



2. What features would you like the app to have to make your buying or selling experience easier?

Options:

- Filter by categories (clothing, accessories, etc.)
- Filter by price
- Filter by location



Others:

- Filter by clothing item status

3. How would you like the products to be displayed in the app?

Options:

- With photos or videos
- With opinions and reviews from other users

Con fotos o videos	15
Con opiniones y reseñas de otro...	2
Otras	3



Others:

- Both
- All of the above

4. Would you like to have the option of direct contact with other users (sellers or customers) in the application?

Options:

- Yes, to ask questions about the products
- Yes, to negotiate prices or sales conditions
- No, I prefer not to have direct contact with other users

Sí, para hacer preguntas sobre l...	13
Sí, para negociar precios o cond...	8
No, prefiero no tener contacto ...	0
Otras	0



5. What information about the product would you like to see provided in the app?

Options:

- Detailed product description
- Product condition (new, used, etc.
- Size and measurements

Descripción detallada del produ...	9
Estado del producto (nuevo, usa...	5
Tamaño y medidas	2
Otras	5



Others:

- All of the above

The users, mostly students from the Francisco José de Caldas District University, who completed the form were:

Respuestas
Ana Quintero
Andres Mora
Pablo Martínez
Sergio Nicolás Mendivelso Martinez
Samuel Delgadillo
Juan Sebastian Bravo Rojas
Daniel Camacho
Johan Ramirez
Santiago Nicolas Triana
Simón Salamanca
Marlon Yecid Riveros Guío
Miguel Contreras
Edgar Julian Roldan Rojas
Julián Valencia
Nicolás Hernández Vega
Betsy Garcés
Luis Lopez
Nicolas Aranda Ramirez
Alhan Delgadillo

Once the responses are collected, user stories are created:

- "As a buyer, I want to be able to filter products by category and price to easily find the second-hand clothes I need"
- "As a seller, I want to be able to add detailed descriptions and high-quality photos to show my products in the best possible way"
- "As a user, I want to be able to see products with photos and detailed descriptions to have a clear idea of what I am buying"

- "As a buyer, I want to be able to see detailed information about the product, such as condition and measurements, to make an informed decision"
- "As a user, I want to have the option to leave messages to other users, such as sellers or customers, to ask questions or negotiate terms of sale, even if I do not necessarily require an immediate response"

After analyzing user responses, it was noted that most users value the ability to filter products by categories and price, as well as the ability to view products with photos and detailed descriptions. The importance of detailed product information, such as condition and measurements, was also highlighted.

Additionally, it was noted that users wish to have the option of direct contact with other users, although it is recognized that, within the scope of the project, it is not possible to implement a real-time chat function. However, ideas were generated to leave messages between users, which would allow effective although not immediate communication.

In general, the needs of users will be covered with the proposed functionalities, and additional suggestions will be taken into account to improve the user experience in the second-hand clothing sales application.

### **3. APPLICATION PROCESSES AND COMPONENTS**

#### **User Registration**

User registration will be a simple and quick process. Users will enter their personal information, such as name, email, and password, in a registration form. The application will create an account for the user and redirect them to the home page.

User Interface: The user interface will display a registration form with fields for name, email, and password.

Business Logic: The business logic will verify that the information is valid and create an account for the user.

## **Product Publication**

Product publication will be an easy and accessible process for sellers. Sellers will enter product information, such as description, price, photos, and categories, in a publication form. The application will publish the product on the platform.

User Interface: The user interface will display a publication form with fields for description, price, photos, and categories.

Business Logic: The business logic will verify that the information is valid and publish the product on the platform.

## **Product Search and Selection**

Product search and selection will be an intuitive and easy-to-use process. Buyers will enter their search criteria, such as category and price, in a search form. The application will display the results in a list and allow buyers to select products to add to their cart.

User Interface: The user interface will display a search form with fields for category and price, and a list of results.

Business Logic: The business logic will search for products that match the search criteria and display the results in a list.

## **Payment and Shipping**

Payment and shipping will be a secure and reliable process. Buyers will enter their payment information, such as card number and shipping address, in a payment form. The application will process the payment and display a confirmation message.

User Interface: The user interface will display a payment form with fields for card number and shipping address.

Business Logic: The business logic will process the payment and display a confirmation message.

## **Reviews and Ratings**

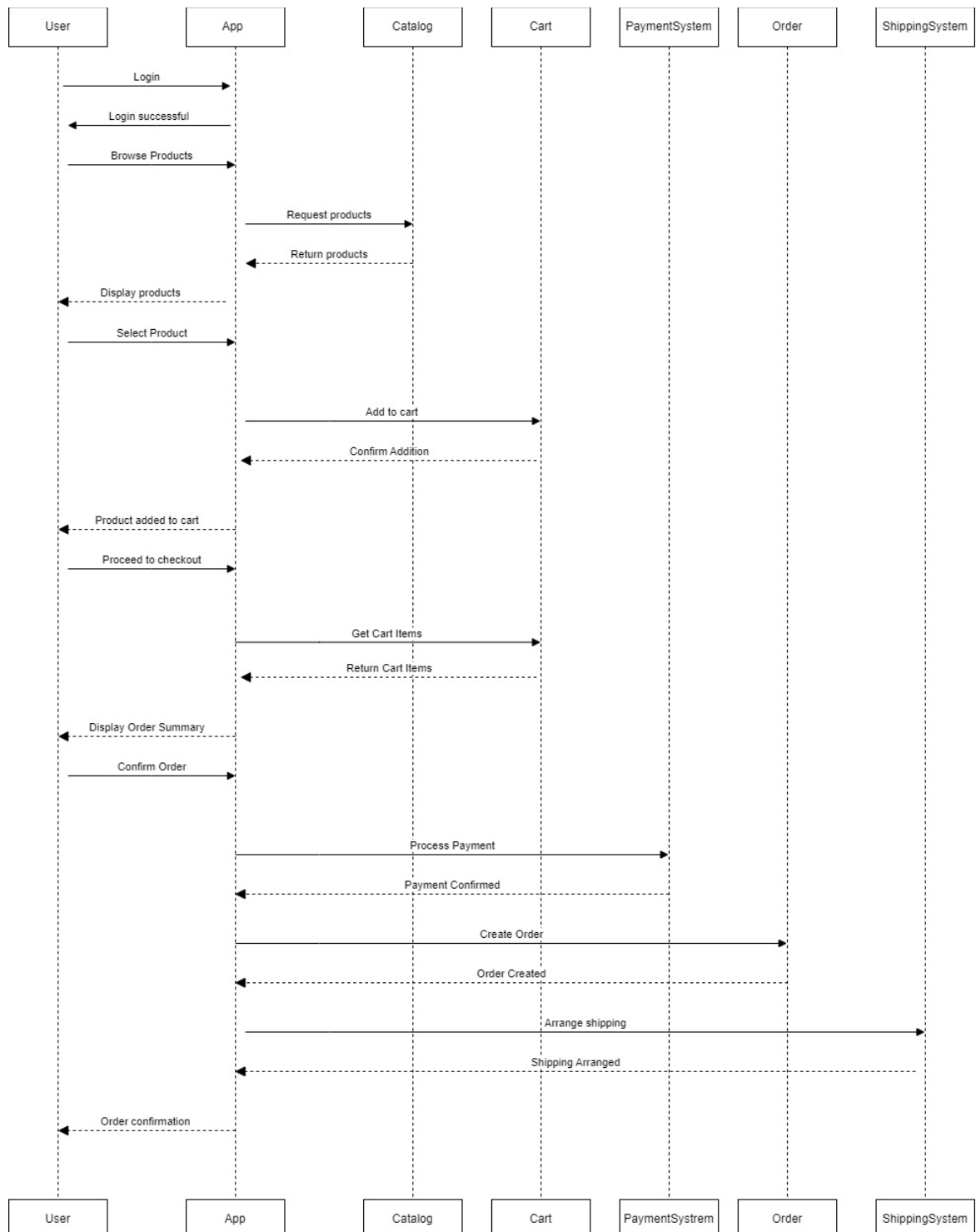
Reviews and ratings will be an important process for evaluating the quality of products and sellers. Buyers will enter their review and rating, such as text and stars, in a review form. The application will publish the review and rating on the product and seller pages.

User Interface: The user interface will display a review form with fields for text and stars.

Business Logic: The business logic will publish the review and rating on the product and seller pages.

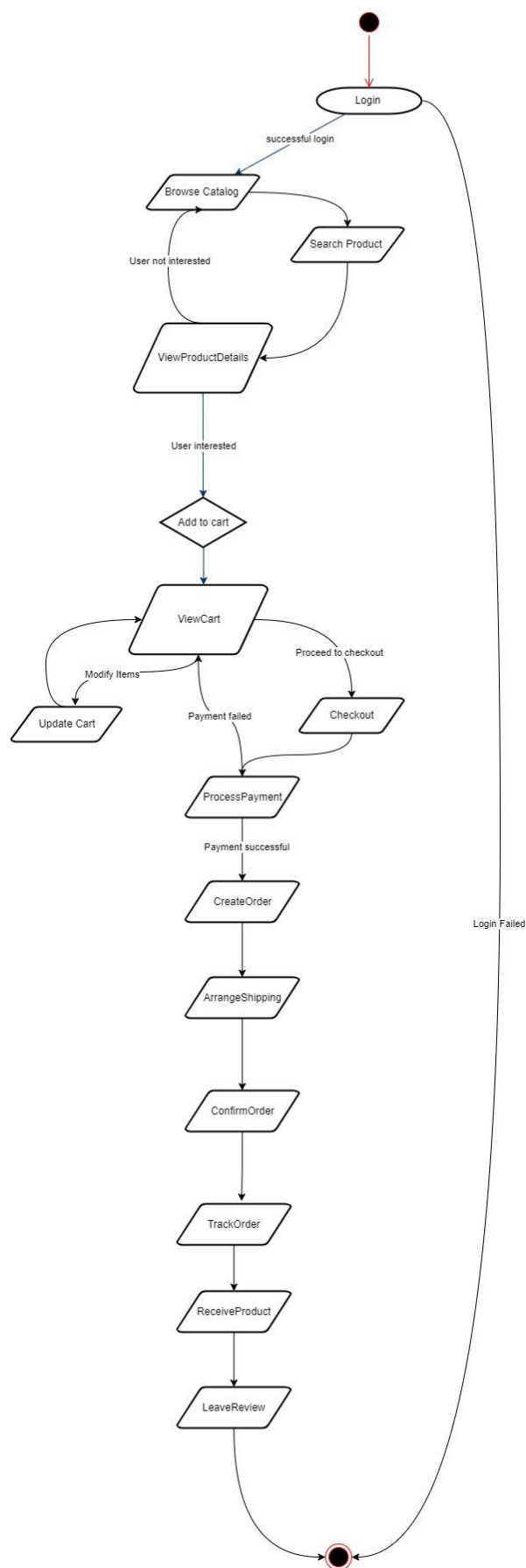
## 4. DIAGRAMS

### Sequence diagram





Activity Diagram



Class Diagram

