

## First use scenario

Jason Jiang opened the secondhand shopping website based on his classmates' recommendation. When he opens the website, he is first greeted with a simple but friendly word "Hello, Welcome" on a neat user interface. Then there's a guideline which introduces some basic functions of the website to him. Jason begins to set his preference. "electrical appliances" is his primary choice. Video games, photography, music are his interests and he sets his price filter around \$30. Then he starts to complete his profile "Age: 20, Gender: male, Occupation: student".

After all set, he is finally guided to the product area. There is a searching bar on the top of the screen. Under the search bar, there are some pictures of electrical appliances recommended by the system that he might show interest in, and they are all within his budget. He is attracted by a secondhand camera, so he clicks into it. While checking the camera's details, he sees the seller's rating and reads positive reviews from previous buyers. He can't make a decision so he

- Ability to have a comfortable UI
- Ability to have basic tutoring guidance

- Ability to have a greeting when user enter the website or app.
- Ability to register and log in securely
- Ability to have password reset and recovery options
- Ability to provide two-factor authentication methods for added security

- Ability to set and save user's own preference
- Ability to have a user profile page
- Ability for users to customize their app experience, such as themes, layouts, or notification preferences

- Ability to have a search bar
- Ability to provide suggestions that are related to user's preference
- Ability to show goods that are on sale or seasonal

turns to real-time chatting with the owner to ask the current condition of the camera. The owner is online and he responds quickly. Jason is satisfied with it and he continues to pay for it by his preferred payment method that he considers safe. After around 2 seconds, the website confirms it and Jason is looking forward to receiving his goods. He then clearly saw the information about the shipment of his product. After the product has left the warehouse, the location and arrival time of the shipment can be displayed in detail on the website. Three days later, he received the goods at his doorstep. After confirming that the item was in good condition, he clicked the Confirm Receipt button to end the transaction.

- Ability to have a seller rating system for users

- Ability to have an online chatting system

- Ability to ensure the safety of the payment

- Ability to check the shipment status

- Ability to provide enough details of the product

- Ability to allow users to return the good

# Typical Use Scenario

Every day, Jason habitually opens the secondhand shopping website on his laptop. With a keen interest in smartwatches, he heads straight to the "Wearable Technology" category. To filter for affordable options, he applies a "low to high price" filter, swiftly narrowing down the best deals within his budget range of \$30-\$50. As he scrolls through the product listings, Jason uses his accumulated experience to identify offerings from sellers with whom he's had successful transactions. He also keeps an eye out for fresh listings from highly rated sellers, prioritizing products with detailed descriptions and clear images.

Jason spots a listing that piques his interest—a smartwatch at an attractive price. Recognizing the seller's username from previous interactions, he initiates a real-time chat. They engage in a discussion about the smartwatch's specifications, battery life, and overall condition. Their prior interactions have fostered trust and open communication. Having negotiated a price, Jason proceeded with the purchase, selecting his preferred secure payment method. The transaction is smooth and secure,

- Ability to have a precise and functional filter for all kinds of categories
- Ability to set the range of the good
- Ability to rank sellers with regard to their ratings
- Ability to show real pictures of the product

- Ability to have a real-time chat server

- Ability to have a clear and accurate description of the product

- Ability to choose the preferred payment method

thanks to the app's reliable payment processing. He promptly receives an order confirmation email, providing him with a clear timeline for delivery.

After a successful transaction, Jason promptly leaves positive feedback for the seller, reinforcing their trust-based relationship. He continues to explore the website for potential future purchases, opting to follow his favorite sellers and receive notifications about new listings.

The cycle persists as Jason consistently utilizes the website to explore and secure great deals on smartwatches. He revels in the seamless, efficient, and trustworthy experience that greets him with each visit to the platform.

- Ability to have a reliable payment system
- Ability to notify both users and sellers of the confirmation of the transaction
- Ability to send email for confirmation
- Ability to have multiple choices for sending the confirmation
- Ability to allow users to make comments and rates for their purchases
- Ability to provide a system for reporting and moderating reviews
- Ability to integrate with some other social apps for sharing with their friends
- Ability to save “favorite” sellers
- Ability to ensure the security of user’s information

Additional user requirements:

- Ability to call the consumer hotline

- Ability to sign up a VIP account to purchase discounted products
- Ability to refund if the product does not match expectation