Book Alley

Use-Case Specification: Add product to cart

Version 1.0

Revision History

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 09/11/2023 | 1.0 | Initial | Dang Ha Huy |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Table of Contents

[**1. Use-Case Name 4**](#_heading=h.30j0zll)

[1.1 Brief Description 4](#_heading=h.1fob9te)

[**2. Flow of Events 4**](#_heading=h.3znysh7)

[2.1 Basic Flow 4](#_heading=h.2et92p0)

[2.2 Alternative Flows 4](#_heading=h.tyjcwt)

[2.2.1 Invalid data 4](#_heading=h.3dy6vkm)

[2.2.2 Password strength 4](#_heading=h.1t3h5sf)

[2.2.3 If user already have an account 4](#_heading=h.lka2uov0a3tn)

[**3. Special Requirements 4**](#_heading=h.4d34og8)

[3.1 Usability 4](#_heading=h.2s8eyo1)

[3.2 Accessibility 4](#_heading=h.w5h01a98mda8)

[3.3 Performance 4](#_heading=h.zcc52lmbsk9d)

[3.4 Security 4](#_heading=h.2xtpsiuct0xk)

[3.5 Reliability 5](#_heading=h.yicw3wmyb1ux)

[**4. Preconditions 5**](#_heading=h.17dp8vu)

[4.1 Internet connectivity 5](#_heading=h.3rdcrjn)

[4.2 User authentication 5](#_heading=h.5hl05lmkmk0i)

[4.3 Product page navigation 5](#_heading=h.mmfvene2fq7m)

[4.4 Product availability 5](#_heading=h.dfau774e9zgp)

[4.5 No conflicting processes 5](#_heading=h.veoohrz9bjco)

[4.6 No error 5](#_heading=h.we3pmydkyozv)

[**5. Postconditions 5**](#_heading=h.26in1rg)

[5.1 Successful addition to cart 5](#_heading=h.lnxbz9)

[5.2 Update cart contents 5](#_heading=h.tuvijemqy6eu)

[5.3 Shopping options 5](#_heading=h.bqy3ll8rw923)

[5.4 Cart persistence 5](#_heading=h.vs69zr2uq5el)

[5.5 Synchronize cart 5](#_heading=h.cck0mpihws0q)

[5.6 Quantity update 5](#_heading=h.p09heyz8q9ez)

[**6. Extension Points 6**](#_heading=h.35nkun2)

[6.1 Customized discount 6](#_heading=h.1ksv4uv)

[6.2 Shipping integration 6](#_heading=h.8yby1xzh1l53)

Use-Case Specification: Add product to cart

# Use-Case Name

## Brief Description

The registration use case for Book Alley enables user to create a new account to gain access to the all of the website features

# Flow of Events

## Basic Flow

1. After browsing, the user navigates to the product page and selects the book they want to add to the cart.
2. The choose the desired quantity of the book
3. The user click on the “Add to cart” button on the product page
4. The selected book is added to cart
5. The system updates the cart with the book, its quantity and the cart total
6. The user is presented with options to continue shopping or proceed to checkout.

## Alternative Flows

### Insufficient stock

1. The user selects a book with insufficient stock.
2. The system notifies the user that the selected book is out of stock.
3. The user may choose an alternative product or update the quantity.

### Product unavailable

1. The user selects a book which is unavailable (or discontinued)
2. The system notifies the user that the selected book is currently unavailable
3. The user may choose an alternative product.

# Special Requirements

## Usability

* The “Add to cart” button must be prominently displayed on the product page so that users could easily add them to their shopping cart

## Accessibility

* The web application should adhere to accessibility standards, making it usable for people with disabilities.

## Performance

* The process of adding product to cart must be fast and responsive, delay must be under 2-3 seconds

## Security

* The shopping cart can only be accessed by the people that have access to the account. Cart contents must be encrypted during transmission and security measures should be applied to prevent common threats

## Reliability

* The “Add to cart” function must be reliable, ensure that products are added to cart properly and will always remain in the cart until either the user complete the purchase or remove them from the cart

# Preconditions

## Internet connectivity

* The user's device should have a working internet connection to access the website

## User authentication

* The user must be logged in to their account.

## Product page navigation

* The user should be on the product page of the book they intend to add to the cart.

## Product availability

* There must be enough stock of the selected book available.

## No conflicting processes

* The user has not already initiated a different process within the website that conflicts with the search functionality (e.g., placing an order, viewing order history, accessing account settings).

## No error

* The user has not encountered any critical errors during the browsing or accessing the product page that could affect the buying process

# Postconditions

## Successful addition to cart

* Announce to the user that the selected book has been successfully added to the shopping cart.

## Update cart contents

* The cart contains the added product with the chosen quantity, and the cart’s total cost is updated accordingly.

## Shopping options

* The user is presented with options to either continue shopping or proceed to checkout.

## Cart persistence

* The cart will always remain accessible at all time when the user is on the website and the products within the cart still retain even when the user is logging out and logging back in

## Synchronize cart

* The shopping cart remain consistent across multiple different devices

## Quantity update

* If the user add the same product again, that product within the cart will automatically update its quantity
* User can also update the quantity of any products that have been added to cart within the shopping cart page

# Extension Points

## Customized discount

* Allow for the integration of custom discount and promotion modules, enabling the addition of various promotional strategies.

## Shipping integration

* Allow for the integration of various shipping methods and carriers to give users flexibility in choosing delivery options.