User Requirements specifications



Content

Introduction

Functional Requirements 1

Non-Functional Requirements 2

Use cases 3

**Introduction**

The following sections will detail the user requirements, functional requirements, non-functional requirements, and use cases necessary to create a successful online bike shop for Cycle Universe.

**Functional requirements**

* 1. The website should have a homepage that displays the latest bikes in the store.
* 2. Users should be able to filter bikes by kind and search term.
* 3. The website should have detailed pages for every bike with necessary descriptions and high-quality images.
* 4. Registered users should be able to add items to their shopping cart and view them later.
* 5. The desktop application should allow the store to manager to add new bikes to the system so they are displayed on the website

**Non-Functional requirements**

* The website should load quickly to ensure a good user experience.
* The webpage should be easy to navigate and user-friendly.
* The page should be secure and protect user data.
* The desktop application should be reliable and performant.

**Use cases**

UC-1: Browse bikes without registering

Actor: User

Precondition: User is not registered

Main Success Scenario:

1. Actor visits the store page
2. System displays all of the available bikes
3. Actor selects a bike to view more details
4. System displays the detailed bike page with specifications and images

Extensions: None

UC-2: Register an account

Actor: User

Precondition: The user does not have an existing account

Main Success Scenario:

1. Actor goes to sign up page
2. System prompts the actor to fill in registration information
3. Actor fills in the required information and submits the form
4. System confirms the registration and shows the login form Extensions:

4a: Actor enters invalid information

.1: System displays an error message and prompts the actor to correct the information

.2: Return to MSS step 3

UC-3: Filter bikes by type

Actor: User

Precondition: Actor has already accessed the store page

Main Success Scenario:

1. Actor selects a type of bike from the filter options

2. System updates the displayed bikes to match the selected filter

3. Actor selects multiple type of bikes from the filter options

4. System updates the displayed bikes to match the selected filter

Extensions: None

UC-4: View detailed bike page

Actor: User

Precondition: User has a device with internet

Main Success Scenario:

1. Actor visits the website
2. System displays the homepage with 3 of the latest bikes
3. Actor selects a bike to view more details
4. System displays the detailed bike page with specifications and images

Extensions: None

UC-5: Add new bike to inventory

Actor: Store Manager

Precondition: Actor is logged in

Username:

Password:

Main Success Scenario:

1. Actor opens the desktop application by completing the login information
2. System displays the inventory management interface
3. Actor selects the add bike option
4. System prompts the Actor to fill in the required information for the new bike
5. Actor fills in the information and submits the form
6. System adds the new bike to the inventory

Extensions:

4a: Store Manager enters invalid information

.1: System displays an error message and prompts the Actor to correct the information

.2: Return to MSS step 4

UC-6: Add Items to the shopping cart

Actor: User

Precondition: User is logged in

Email: [doru@gmail.com](mailto:doru@gmail.com)

Password: password

Main Success Scenario:

1. Actor goes to store page

2. System displays all the bikes in the shop

3. Actor adds a bike to the shopping cart

4. System displays user’s shopping cart with the new item in it

UC-07: Browse Bikes using search bar

Actor: User

Precondition: Actor has already accessed the store page

Main Success Scenario:

1. Actor searches a keyword in the search bar

2. System display the search result

Extensions:

2a: Actor searches invalid keyword

.1: System shows that no result was found

.2: Return to MSS step 1