Use Case: Renting a bicycle

Primary Actor: Customer

Scope: The Bike Shop Website, renting a bicycle online

Level: User goal

Stakeholders and Interests:

Customer – wants to reserve a bicycle online to rent and pick it up later.

Business – wants payment in return for renting out its bikes.

Preconditions: None

Minimal guarantee: The Bike Shop informs the user that the Customer was unable to rent the bike.

Success guarantee: The Customer rents and pays for a specific bike(s) to be picked up at a certain time.

Main success scenario:

1. Customer - selects what bike(s) they want to rent and when.
2. Business – checks to see if those bikes are available at that time, if they are, adds them to the customer’s cart.
3. Business – requests that the customer either signs into an account or creates a new account.
4. Customer – creates a new account or signs into an existing account.
5. Business – verifies that the customer wants to rent the bikes for the requested time and gives the customer the total payment about that will be needed to do so.
6. Customer – confirms invoice.
7. Business – requests payment
8. Customer – enters credit card information and pays.
9. Business – accepts the payment, and reserves the bike(s) at that specific time, so that they cannot be rented by someone else.

Extensions:

2a. Bikes are unavailable to rent at that time.

2a1. System informs the customer that the bikes are unavailable and to make a new selection.

4a. Customer puts in invalid login information into sign-in.

4a1. System reports invalid login to user.

4a2. Customer either retries log-in, attempts to recover login information, or goes back.

4b. Customer puts invalid information into creating a new account.

4b1. System reports invalid information given.

4b2. Customer either puts in valid information or goes back.

6a. Customer does not agree to invoice.

6a1. Customer goes back to change what bikes are in their cart.

6a2. Customer Exits the website, cart is saved as a cookie on their system.

7a. Business is unable to connect to company. that helps handle payments.

7a1. System is unable to make a connection to the company application that hands payments.

7a2. System informs user that an error as accord and to try again later.

8a. Customer puts in invalid information in payment.

8a1. System tells customer that they have entered invalid information.

8a2. Customer either puts in valid information or exits.

9a. Between the bikes being added to the cart to when they were rented, they became unavailable.

9a1. System Informs the customer that they bikes that they requests are no longer available.

9a2. Customer either goes back to select new bikes to rent or exits.

9a3. Payment was not accepted unless verification of bikes being reserved was made.

Part 1: Identify the Use Cases

Customer Renting a Bicycle.

Employee Fetching a Rented Bicycle.

Part 2:

A diagram of a company

Description automatically generated

Part 3: