

Use Case “Return a bike”

1. Use case code

UC0010

2. Brief Description

This use case describes the interactions between User and EBR software when User wishes to return a bike.

3. Actors

3.1. User

3.2. EBR software

4. Preconditions

4.1 User rented a bike

5. Basic Flow of Events

Step 1. The User requests to return a bike

Step 2. The User enters the barcode

Step 3. EBR software checks the barcode

Step 4. EBR software converts barcode to rental code

Step 5. EBR software closes the user's renting session

Step 6. EBR software Summarizes session information, calculates rental fee, calculates excess money and notifies to User

Step 7. User confirms information

Step 8. EBR software calls Use case “Refund deposit after deducting rental fee”

Step 9. EBR software saves and prints bill for user

6. Alternative flows

Table 1 - Alternative flow of events for UC “Name of the Use Case”

No	Location	Condition	Action	Resume location
1	At step 3	Invalid barcode	Notifies wrong barcode	Step 2
2	At step 8	Transaction fail	Notifies transaction fail	End use case

7. Input data

Table 2 - Input data of ...

No	Data fields	Description	Mandatory	Valid condition	Example
1	Barcode	Bike's barcode	Yes	String	1231abc212

8. Output data

Table 3 - Output data of ...

No	Data fields	Description	Display format	Example
1	End time	Ending time of the User's renting session	hh : mm	12:20 10/10/2020

			DD/MM/YY	
2	Usage time		. A number of minutes usage	120
3	Renting fee		. Comma for thousands separator . Positive integer . Right alignment	123,000
4	Refund deposit	deposit after deducting rental fee	. Comma for thousands separator . Positive integer . Right alignment	100,000

9. Postconditions