Use Case "Return bike"

1. Use case code
UC004

2. Brief Description
This use case describes the interaction between users, Interbank and EcoBikeRental software when the users wishes to return a bike.

3. Actors
3.1 User

3.2 Interbank

4. Preconditions
The user rented bike

5. Basic Flow of Events
5.1 The EcoBikeRental software displays a list of docks (Table A)

5.2 The User chooses a dock and request to return a bike

5.3 The EcoBikeRental software calculates the amount of money corresponding to the rental period

5.4 The EcoBikeRental software request to the Interbank to return deposit and deduct the rental fee

5.5 The Interbank processes the transaction

5.6 The EcoBikeRental software saves the rental transaction

5.7 The EcoBikeRental software shows the rental transaction. (Table B)

6. Alternative flows

Table N-Alternative flows of events for UC Place order

No	Location	Condition	Alternative flow	Resume location
1.	At Step 5.2	If the number of empty docking points is full	▪ The software notifies the number of empty docking points is full. ▪ The user selects another dock.	Resumes at Step 5.1

7. Input data

Table A-Input data of List of docks

No	Data fields	Description	Mandatory	Valid condition	Example
1.	Name	Tên bãi đỗ	Yes		Ho Tay
2.	Address	Địa chỉ của bãi đỗ	Yes		600 Lac Long Quan, Nhat Tan
3.	Dock area	Khu vực bãi đỗ	Yes		Lac Long Quan
4.	Number of available bikes	Số lượng xe ở bãi đỗ	Yes		20
5.	Number of empty docking points	Số lượng chỗ đỗ xe còn trống	Yes		5
6.	Distance	Khoảng cách từ người dùng đến bãi đỗ xe	Yes		40m

8. Output data

Table B-Output data of Rental Transaction

No	Data fields	Description	Display format	Example
1.	Transaction ID	Mã giao dịch		12345678
2.	Bike type	Loại xe	A Standard bicycle, a standard e-bike, a twin bike	A standard bicycle
3.	Bike's barcode	Mã barcode của xe		002001
4.	Deposit	Tiền đặt cọc xe (VND)		400,000
5.	Rent dock	Bãi đỗ mà user mượn xe		Ho Hoan Kiem
6.	Return dock	Bãi đỗ mà user trả xe		Ho Tay

7.	Renting time	Thời gian mượn xe		3h15p
8.	The amount	Phí mượn xe (VND)		120,000
9.	Date/time	Thời gian lúc trả xe	Year-month-day hour:minute:second	2021-10-17 8:35:20

9. Postconditions

The user received the deposit

10. Activity diagram