**Use Case “Rent a bike”**

1. **Use case code**

UC-RA02

1. **Brief description**

Customer rents a bike via Eco App.

1. **Actor**

Customer

1. **Preconditions**

There is an active network connection to the internet

User login successfully to app

User find a dock on site and there is still available bikes for renting

1. **Basic flow of events**

Step 1: Customer scans the barcode on the lock via app

Step 2: The software convert barcode to bike code of the system

Step 3: The software check the validity of the bike code

Step 4: The software shows the information of that bike

Step 5: Customer chooses payment method, default is pay by credit card

Step 6: Customer inputs card information and transaction content

Step 7: Software calculates the deposit fee

Step 8: Customer confirms transaction

Step 9: Software deducts money from customer account

Step 10: Software shows the information of transaction to screen and save that transaction to the system

Step 11: Software sends email informing customer about the status of transaction

1. **Alternative flow**

*Table 1 - Alternative flow of events input card information*

| No | Location | Condition | Action | Resume location |
| --- | --- | --- | --- | --- |
| 1 | Step 3 | Bike code not exist | Show error | Previous step |
| 2 | Step 6 | Invalid card information | Show error | Previous step |
| 3 | Step 6 | Not enough balance | Notify customer | Previous step |

1. **Input data**

*Table 2 - input of scanner to rent bike*

| No | Data field | Description | Mandatory | Valid condition | Example |
| --- | --- | --- | --- | --- | --- |
| 2 | Barcode |  | Yes | Exist barcode | 123 |

*Table 3 - Input data of card and transaction*

| No | Data field | Description | Mandatory | Valid condition | Example |
| --- | --- | --- | --- | --- | --- |
| 1 | Card holder name |  | Yes | String | Nguyen Van Trang |
| 2 | Card number |  | Yes | String | 031201002654 |
| 3 | Issuing bank |  | Yes | String | Viettinkbank |
| 4 | Expiration date |  | Yes | Date time | 15/12/2022 |
| 5 | Security code |  | Yes | String | IT1897 |
| 6 | Transaction content |  | Yes | Multiline sentence | Pay for e-bike |

1. **Output data**

*Table 4 - Output to screen after depositing successfully*

| No | Data field | Description | Display format | Example |
| --- | --- | --- | --- | --- |
| 1 | Card holder name |  | String | Nguyen Van Trang |
| 2 | Card number |  | String | 031201002654 |
| 3 | Transaction content |  | Multiline sentence | Pay for e-bike |
| 4 | Amount to be deposited |  | Positive integer  Commas for thousand separators | 100,000 VNĐ |
| 5 | Bike code |  | String | 123 |
| 6 | Bike type |  | One among: E-bike, Normal bike, Twin bike, Twin E-bike | E-bike |
| 7 | Current battery |  | Positive integer | 10% |

1. **Post conditions**

Transaction is saved to the system and the logs update accordingly.