# **UP Bike Share – Android App**Use Case Specification

#### Submitted to:

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## Unique Reference:

The documents are stored in: https://github.com/devsofup/UPBike-Share-Android/tree/master/01-Project-Documents

## **Document Purpose:**

This document serves to detail the structure of the Bike Share project's main functionalities or use cases and how they work, without too much detail on the software implementation. This will serve as the agreement between the client and the developers as to how each of the functionalities will work. This will also guide the developers as to what are the most important aspects of the application.

## Target Audience:

This document is mainly for the viewing of the client and the development team. It will also be viewed by the guiding faculty.

## **Revision Control**

#### History Revision:

| Revision<br>Date | Person<br>Responsible                | Version<br>Number | Modification   |
|------------------|--------------------------------------|-------------------|--|
| 09/17/15         | Jaypee San Gabriel                   | 0.5               | Placed description, preconditions, postconditions, relationships and special requirements for each use case. |
| 09/18/15         | Jaypee San Gabriel<br>Steven Barrozo | 1.0               | Complete rough draft. Created activity flow and activity diagrams for each use case.                         |

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Use-Case Name: Use-Case 7.0 Lock Bike

Description: After a Bike Renter has rented a bike and reached a destination, he/she can lock the

bike at a safe location. This will be done through the Bike Share module, allowing the

Web Server to update its data.

**Preconditions:** The Bike Renter reserved a bike through the Reserve Bike use case.

The Bike Renter is 'Logged In.'

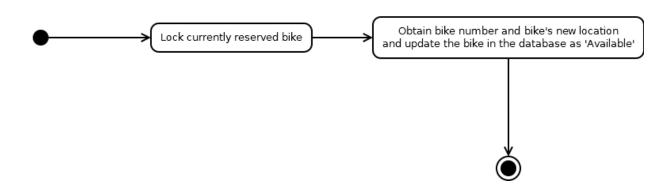
There is a working connection with the Web Server.

#### Flow of Events:

| Scenario Name                                     | Description   |  |  |
|---|---|--|--|
| Scenario 1 (Basic Flow) The Bike Renter locks his | The Bike Renter prompts the system that he/she will be locking his/her reserved bike at a station.  |  |  |
| reserved bike.                                    | <ol><li>The Web Server obtains the bike number and the bike's new<br/>location then updates the database, placing the respective bike as<br/>'Available.'</li></ol>                 |  |  |
| Scenario 2 (Connection Error)                     | <ol> <li>If at any time in the basic flow, the connection with the Web Server<br/>is lost, the system will display a Connection Error, and log out the<br/>current user.</li> </ol> |  |  |

## Activity Diagram of the Flow of Events:





Postcondition: The respective bike will be marked as 'Available.'

Relationships: Upon using this use case, the Update Bike Status use case will also be used by the

Web Server in order for the bike data to still be accurate.

#### Special Requirements:

Physical devices for tracking associated with the bikes function properly.

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