UP Bike Share – Android App

Use Case Specification

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Unique Reference:

The documents are stored in:
https://github.com/devsofup/UPBike-Share-Android/tree/master/02-Requirements-Engineering

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 Date	***Person Responsible***	***Version 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 Steven Barrozo	1.0	Complete rough draft. Created activity flow and activity diagrams for each use case.
09/25/15	Jaypee San Gabriel Steven Barrozo Mark Anton Mamac	1.2	Changed use case from 'Update Bike Status' to 'Sync Data with Server' and changed corresponding details.

Use-Case Name: Use-Case 8.0 Sync Data with Server

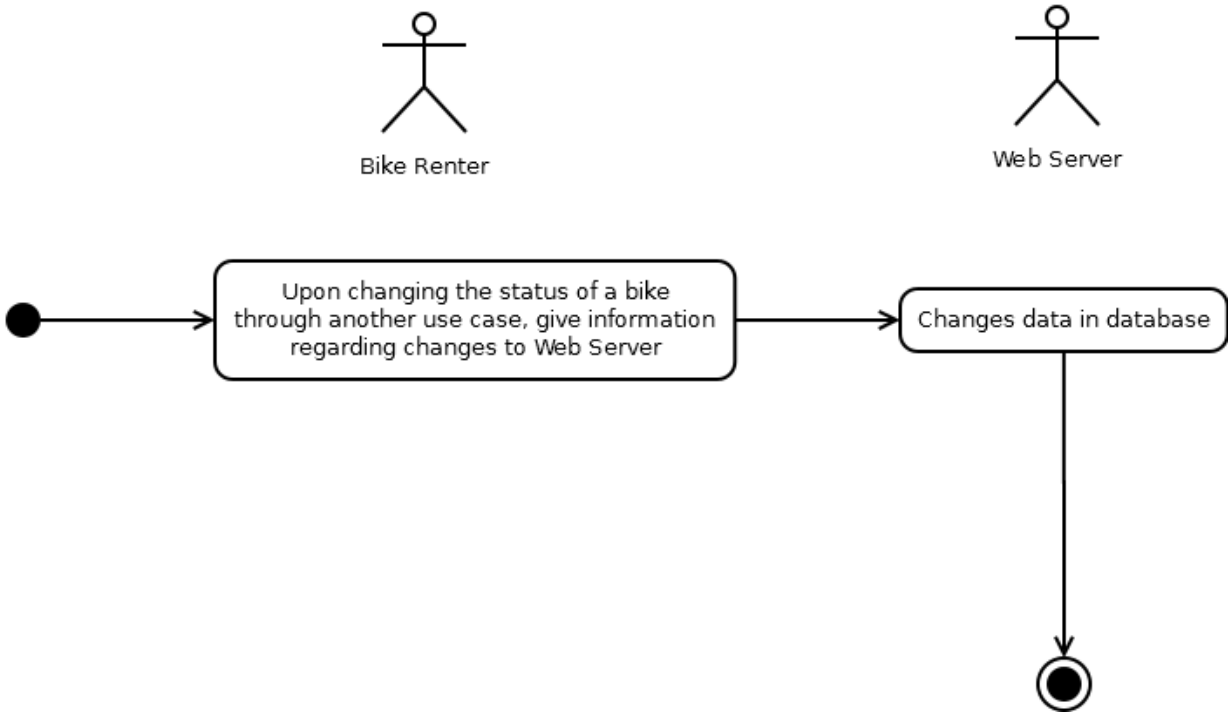
Description: Whenever a bike renter requests for a function such as locating bikes, renting bikes and locking bikes, the overall data is changed and thus the Web Server is required to update the statuses of bikes. The application is then also tasked with synchronizing the data it holds with the Web Server's data.

Preconditions: There is a working connection with the Web Server.

Flow of Events:

Scenario Name	***Description***
Scenario 1 (Basic Flow) The application synchronizes its data with the Web Server.	1. The application gives the necessary information such as location and state to change from another corresponding use case (Reserve Bike, Lock Bike, Report Bike Issue) and the id of the bike that will change status. 2. The Web Server changes the respective data in the database.

Activity Diagram of the Flow of Events:



Postcondition: NONE

Relationships: Used to present accurate data in the Search Available Bikes and Reserve Bike use cases.

Special Requirements:

Physical devices for tracking associated with the bikes function properly.