

UP BikeShare Web App

Analysis Model

Submitted to:

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Unique Reference:

The documents are stored in: <https://github.com/kozloz/nesy/tree/master/03%20-%20Design%20Engineering>

Document Purpose:

This document serves to guide the development team in the implementation of the system. It visualizes the relationships between the different components of the system.

Target Audience:

This document is primarily to be viewed by the development team.

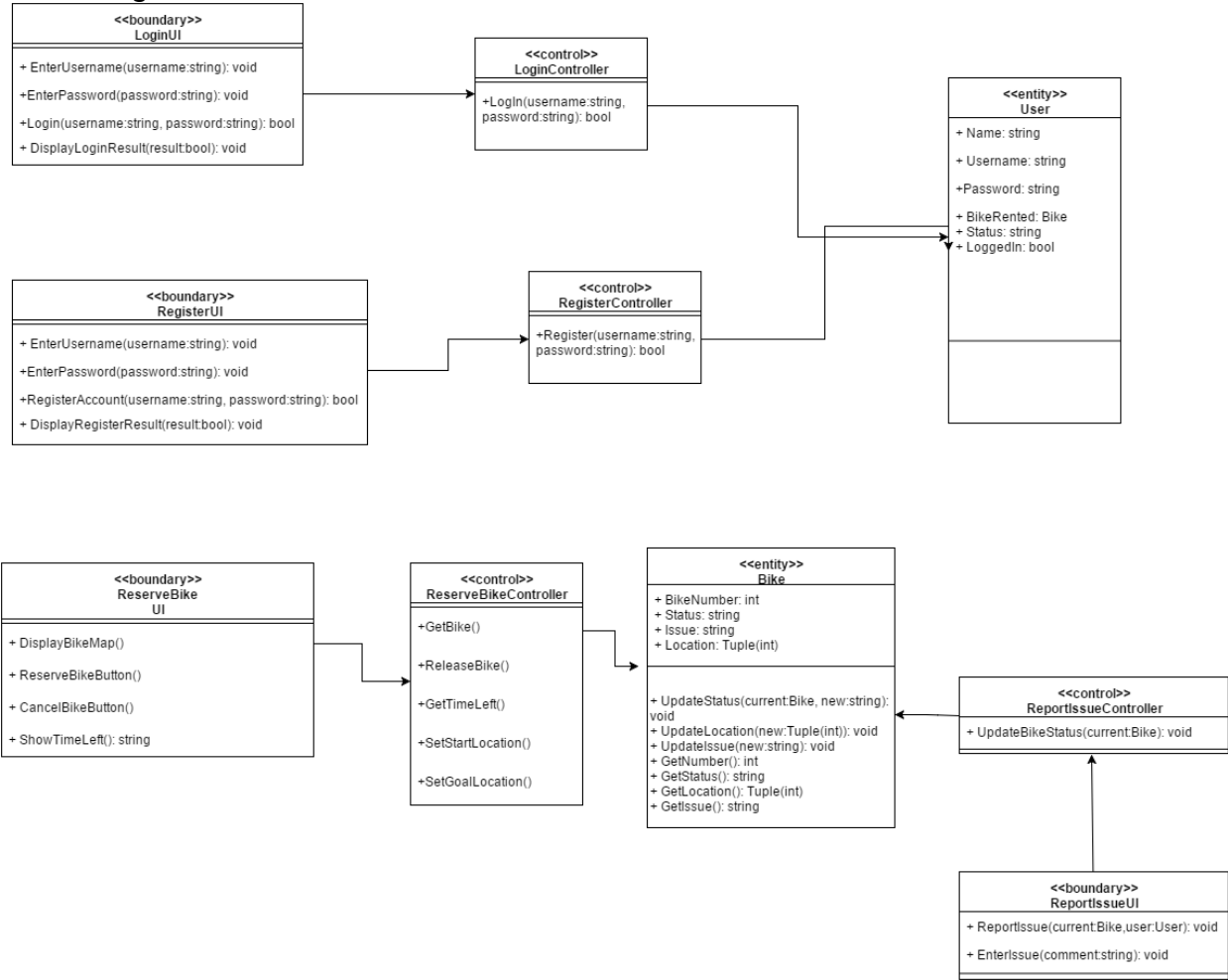
Revision Control*History Revision:*

<i>Revision Date</i>	<i>Person Responsible</i>	<i>Version Number</i>	<i>Modification</i>
12/13/15	Kevin Fernandez John Prudente	1.1	Added Class Diagram and Class Descriptions. Added Document Purpose and Target Audience.

System Name: UP BikeShare

Description: The UP BikeShare Web App must be able to cater to the BikeShare customers important features for use of the system. User must be able create an account, which will be the main interaction between the service and the customer. The user must be able to search bikes in an area, as well as be able to reserve a bike if needed. The user must also be able to report bike issues, as well as other general concerns.

Class Diagram:



Boundary Classes:

Class Name	Description
LogInUI	Provides the UI for user login. Accepts username and password. Displays whether login was successful or not.
RegisterUI	Provides the UI for account registration. It has fields for the username and password, as well as other necessary information for registration. Displays whether registration was successful or not.
ReserveBikeUI	Provides the UI that displays the map where system is active. You can check locations, and make a bike reservation, or cancel it. Displays time remaining to cancel reservation.
ReportIssueUI	Provides the UI that allows the user to report issues with a bike. You can add further comments about the problem.

Control Classes:

Class Name	Description
LoginController	Allows and verifies the user start his/her login session. Connects to the database.
RegisterController	Sends information for registration to the database.
ReserveBikeController	Connects the user information of reservation to the database. Updates bikes being reserved/cancelled. Also updates the time.
ReportIssueController	Updates a bike's status. Connects to the database.

Entity Classes:

Class Name	Description
User	Customer of UP BikeShare. Has all information required by the database.
Bike	Bikes being used by the system. Has all information required by the database.