Boris Bikes

v.1.0

**Key:** Method Test

Bike

**Break**

Create a Bike that’s not broken

Break Bike

Check if Bike is now broken

**Fix**

Create a Bike that’s not broken

Break the Bike

Fix the Bike

Check if broken Bike is not broken anymore

Person

**Can have a Bike**

Set up Person (no Bike)

Give Person a Bike

Person has a Bike

**Hires Bike**

Set up Person with no Bike

Communicate with DockingStation

DockingStation receives message from Person

Person now has a Bike

**Breaks Bike**

Set up Person with Bike

Person breaks Bike

Bike is now broken

**Can Return Bike**

Set up Person with Bike

Person informs DockingStation to receive Bike

DockingStation receives the call from Person to receive Bike

Person returns Bike to DockingStation

Person now has no Bike

DockingStation

**Can Receive Bikes**

Set up DockingStation (no Bikes)

Give a Bike to DockingStation

DockingStation has a Bike

Give another Bike to DockingStation

Count that DockingStation has two Bikes

**Checks Capacity**

Set up DockingStation (no Bikes)

Give 10 Bikes to DockingStation

Check to see if DockingStation has 10 Bikes

Give DockingStation another Bike

Check to see the DockingStation still has 10 Bikes

**Release a Bike to Person**

Set up Docking Station (2 unbroken Bikes)

Release 1 Bike to Person

Check to see DockingStation has 1 Bike

Check to see Person has 1 Bike

Set up DockingStation (1 broken Bike)

Release Bike to Person

Check to see DockingStation has 1 Bike

Person has 0 Bikes

**Release All Broken Bikes to Van**

Set up DockingStation (2 broken Bikes)

Release Bikes to Van

Check to see DockingStation has 0 Bikes

Van has 2 Bikes

Set up Docking Station (1 unbroken Bike)

Release Bike to Van

Check to see DockingStation has 1 Bike

Van has 0 Bikes

**Accept Bike**

Set up Docking Station (0 Bikes)

Receives 1 Bike from Person

Check to see Docking Station has 1 Bike

Person has 0 Bikes

Van

**Pick up Bikes**

Set up van with 0 Bikes

Set up DockingStation with 2 Bikes

Van collects all Bikes from DockingStation

Van has 2 Bikes

DockingStation has 0 Bikes

**Release Bikes**

Set up van with 2 Bikes

Set up Garage with 0 Bikes

Van releases all Bikes to Garage

Van has 0 Bikes

DockingStation has 2 Bikes

Garage

**Accepts Bikes**

Set up van with 2 Bikes

Set up Garage with 0 Bikes

Garage accepts all Bikes

Garage has 2 Bikes

Van has 0 Bikes

**Fix Bike**

Set up Garage with 2 broken Bikes

Garage fixes Bikes

Bikes are fixed (permanently)

**Release Bikes**

Set up Garage with 2 Bikes

Set up Van with 0 Bikes

Garage releases Bikes to Van

Van has 2 Bikes

Garage has 0 Bikes