In Toronto Bike Share program, has been in operation for a while. This allows the users to make short trips around the downtown core using bikes stationed in several locations in the city. There are about 2000 bikes and 200 stations from where bikes can be taken and returned.

Even though there are apps to locate the stations and find the number of available bikes and available docks in each station, there are no means to track the usage of the bikes or condition of the bikes. Too many disabled bikes in the docks means not enough bikes in the station or not enough docks to return the bikes. The most common breakdown of the bikes is flat tire.

By adding location sensors and pressure sensors to the bikes, the Maintenance Manager can monitor the bikes more efficiently and get accurate reports about each station so that he can balance the stations by moving the bikes from one station to another. He can send the maintenance crew directly to the location where the disabled bikes are.
George
Maintenance Manager

I like to do more things with less effort.

About
- 46, Married with two kids. Like to work out and love cycling.
- Works with suppliers, customers and maintenance crew of 5 people.

Responsibilities
- In charge of all the bikes and stations.
- Make decision on adding more stations, docks and bikes.
- Manages the maintenance crew.
- Handles customer complaints
- Report any accidents or incidents
- Quick and easy mode of transportation for short distance
- Cheap alternative to bike rental.
- Finding parking is very difficult if you are using your own bike.
- Little work out as well

Needs
- Make sure all bikes are in good working condition
- Make sure that bikes are available at all the station if possible
- Keep the customers happy with minimum complaints.
- Must identify a broken bike
- Maintain effective maintenance as there is no way to find out the mileage of the bike.
- Most of the time not enough bikes available in the busiest stations.
- Crew has to work in the night and check each station to find broken bikes.

Main Goals
- Make sure all bikes are in good working condition
- Make sure that bikes are available at all the station if possible
- Keep the customers happy with minimum complaints.
- Must identify a broken bike
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Point of View

As a Maintenance Manager, I need a way to keep all the bikes in good working condition and available to all the users so that they can count on getting a bike when they need it.
<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>Send the crew for daily maintenance</th>
<th>Answer the customer’s complaint about unavailability of bikes</th>
<th>Locate the bikes with high mileage for maintenance</th>
<th>Order parts</th>
<th>Getting reports on accidents and minor incidents</th>
<th>Move bikes from unused stations to busy stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINDSET</td>
<td>I don’t know which area to cover today</td>
<td>Another complaint in 30 min. I should really do something to fix this</td>
<td>How am I going to locate them</td>
<td>I have to check the book now</td>
<td>I have to go through the books</td>
<td>A report on the bike usage would be much helpful</td>
</tr>
<tr>
<td>FEELING</td>
<td>😊</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
</tr>
<tr>
<td>TOUCH POINTS</td>
<td>Log book</td>
<td>Customer complaint form</td>
<td>Currently not possible</td>
<td>Order books. Call suppliers</td>
<td>Incident Book</td>
<td>Check each stations</td>
</tr>
</tbody>
</table>
**Inspiration:**

**Bike Share**
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![Bike Share Diagram]

**Object Page**

![Object Page Diagram]