TOUCH IOT WITH SAP LEONARDO

PROTOTYPE CHALLENGE

IOT IDEA: AUTOMATE BUS FACILITIES WITH SENSORS

Template Description
This is a template that can be used for the Prototype Challenge included as part of the openSAP course “Touch IoT with SAP Leonardo.”
Most people across countries still prefer travelling with buses while going to their routine works or for travel purpose. But the fact that people face issues when they don’t have any place for seating and they have to travel standing cannot be ignore. This not only results in tiring but also to their sad mood before going for work. So what if we can do something innovative and help them around with our Internet of Things.

The idea is simple and effective. What if we can have sensors allocated to individual seats, and each of these sensors internally connected to some processor (microcontrollers) which can send and receive data through internet. With the help of this, people can actually decide before starting from home, which bus to select as per the seat vacancy for a particular route and can also block a seat for them by booking the ticket online.

In brief, each bus is identified by its route number and registered bus vehicle number. What users (people) just needs to do, is to open their app, give the route number, post which they will be given a live tracker (exact location and estimated time of reaching of a particular bus stop) of individual buses going on that route, with the number of seat vacancy options. Accordingly users can plan and start and even book online ticket for the respective BUS number as per their timings, for their routine work and pick the required bus with available seat and reach their offices (or any other destination) with comfort.
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Persona Template

GAURAV TAMKORIA

SOFTWARE ENGINEER
Passionate and dedicated to my work and believes in smart work

About
• 26 years old, 4 year’s experience in IT industry
• Love to work hard, and dedicate the same to my company
• Work as software engineer in one of the most reputed consulting company

Responsibilities
• Responsible to support multiple projects.
• Responsible to create new tools to automate manual processes. Understand client’s needs.

Main Goals
• Fulfill my daily targets.
• Manage client and their requirements
• Achieve monthly target set by the company.

Needs
• For creating new automate tools, needs to focus more on work for which I needs to be fresh and relaxed entire day.
• Wants my travel life to be more smooth and comfortable.

Pain Points
• Most of the days, I have to travel long in congested and crowded bus, that too standing entire distance to my office and same while returning to home.
• Reaching office with stress and tiring mood as a result unable to focus on my work.

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Point of View (PoV)

Point of

As a traveler

I need a way to, make sure that whenever I travel using buses, I am able to look for a bus with vacant seats

So that I am ready to work more efficiently and comfortably for the rest of the day. Also I can plan and manage my travel with ease by just using an app and book ticket online if seats available in order to block a seat for myself, which not only provides all facilities at my hand, and also makes my work and life easier and comfortable.
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<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>FEELING</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Prepare for leaving to office ➢ Look for a bus</td>
<td>➢ Felling Fresh New day , new beginning. ➢ Let’s hope I get a seat in bus 😊. ➢ Today I will be reaching office with relax and good mood.</td>
<td>😊</td>
<td>➢ Go to bus stand</td>
</tr>
<tr>
<td>➢ Enter a bus. ➢ Look for a vacant seat.</td>
<td>➢ Today hopefully I will get seat to sit in bus. ➢ No vacant seat. Sad 😓 !!!, today also I have to travel standing.</td>
<td>😞</td>
<td>➢ Look for vacant seat</td>
</tr>
<tr>
<td>➢ Keep looking for a seat till I reach my destination. ➢ Be positive and hope I will get a seat at last.</td>
<td>➢ Half of the journey over still no seat. ➢ Bad luck today let’s hope this doesn’t happens while returning to home.</td>
<td>😞</td>
<td>➢ Keep waiting</td>
</tr>
<tr>
<td>➢ Finally got a seat when just 5 before reaching office. ➢ Enjoy those 5 min of seat assuming got the seat for full journey</td>
<td>➢ Finally!!! , seems like dream comes true. ➢ Would have been better if I got this seat earlier.</td>
<td>😞</td>
<td>➢ Feel happy with whatever you got</td>
</tr>
<tr>
<td>➢ Reached office. ➢ Startup with your daily routine work.</td>
<td>➢ Tired and irritated again. ➢ Let’s get a coffee and make myself relaxed and fresh before starting with the work.</td>
<td>😞</td>
<td>➢ Make yourself calm and relaxed and start with your office work.</td>
</tr>
</tbody>
</table>
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You can use this space to insert your mockup(s):

1st page of the SELF BUS SERVICE SAP IOT TOOL will look like as below

User can click on any of the above 3 radio buttons with giving the required details, and then will be navigated to the next screen.

For example if user selects the first radio button “ROUTE NUMBER”, and press “SUBMIT” they will be navigated to below screen.
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WELCOME TO THE SELF-BUS MANAGEMENT FACILITIES:

500 CA DETAILS
(To know the details & current position of a bus, please click on the bus number)

<table>
<thead>
<tr>
<th>STOPS</th>
<th>TIMINGS</th>
<th>BUS NUMBER</th>
<th>CURRENT SEATS AVAILABLE</th>
<th>Book Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAYDEVA</td>
<td>9:00 AM</td>
<td>KA05KB1212</td>
<td>20</td>
<td>click here to BOOK</td>
</tr>
<tr>
<td>JAYDEVA</td>
<td>9:10 AM</td>
<td>KA05KB0234</td>
<td>8</td>
<td>click here to BOOK</td>
</tr>
<tr>
<td>JAYDEVA</td>
<td>9:15 AM</td>
<td>KA05KB9834</td>
<td>10</td>
<td>click here to BOOK</td>
</tr>
<tr>
<td>JAYDEVA</td>
<td>9:20 AM</td>
<td>KA05KB2345</td>
<td>0</td>
<td>No seats available</td>
</tr>
<tr>
<td>JAYDEVA</td>
<td>9:25 AM</td>
<td>KA05KB5634</td>
<td>18</td>
<td>click here to BOOK</td>
</tr>
</tbody>
</table>

e.g., if user clicks on 2nd row bus number KA05KB0234, you can see the detail as shown below:

DRIVER RAM MOHAN WELCOMES YOU TO BMTC BUS KA05KB0234.
WE WILL BE HAPPY TO SERVE YOU.

CURRENT LOCATION: DAIRY CIRCLE
NEXT STOP: IBC TECH PARK
ESTIMATED TIME TO REACH JAYDEVA: 9:12 AM

(Click on the map above to see the live movement of the bus.)