**User Studies: Designing for the User, not the Product**

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**USER STUDIES + WHY YOU SHOULD CARE**

User studies (a.k.a. usability tests) are commonly run in both industry and research fields to test assumptions with live users, simulating the effects of those assumptions in the real world.

Even though a tech company can identify market needs, it also needs to identify its user base and their needs. Even if the idea is there, the product will never take off if executed poorly. The results of user studies will help improve your user experience and you can treat user studies as a channel to communicate with these companies what you want from their apps.

**RECIPE FOR A USER STUDY**

1. **User Profiling:** Who are your users?
2. **Selective recruitment:** Total? What % of each group do we represent?
3. **Identify Key Points:** What do you want to observe or receive data for?
4. **Scenario Design:** Under which scenarios will users use your app?
5. **Paperwork:** What forms will you need (i.e. consent form)? Checklists for proctors? Instructions? Pre- and Post-Study Questionnaires for users?
6. **Pilot Test:** One practice run-through, to account for timing, logistics, etc.
7. **Testing:** How would you like to test (i.e. A/B Testing, recorded, etc.)?
8. **Post-Testing:** Compile, transcribe and analyze results (sometimes with additional software)
9. **Take Action:** Action varies depending on results and product

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**CONDUCTING A USER STUDY FOR A SAMPLE APP**

"THE PETER APP"

**YOUR USERS:**
- Wellesley Students + Faculty
- Other: MIT students, frequent party-goers + guests

**KEY POINTS/PURPOSE:** What features would Peter riders want in The Peter App?
- Live map with real-time updates?
- Estimated time of arrival?
- Estimated duration?
- Checking in with friends?
- Full/Empty Bus Indicator?
- Multiple buses for certain times?

**SCENARIOS FOR RIDING THE PETER:**

<table>
<thead>
<tr>
<th>REASONS</th>
<th>TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to class</td>
<td>Weekday</td>
</tr>
<tr>
<td>Taking a guest back</td>
<td>Weeknight</td>
</tr>
<tr>
<td>Going out</td>
<td>Weekend</td>
</tr>
<tr>
<td>Meeting up with a friend to travel together</td>
<td>Sunday, every two hours</td>
</tr>
<tr>
<td>Going to the airport</td>
<td>Holiday Time</td>
</tr>
</tbody>
</table>

**SOME USER FEEDBACK:**

- I want to catch the Peter at the Lulu stop, and want to know how full the bus is when leaving the Chapel stop and whether it might skip the Lulu.
- I want to know how long buses usually stay at each stop. I notice that on some weeknights, the bus at Kendall waits for 15-20 min. before going to STUD.
- I want to know when the 6PM bus actually arrives at STUD due to rush hour.
- I want to catch my friend at another stop on the same bus.

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**SHOULD WE INCLUDE THESE FEATURES?**

- How many users are expressing these problems/needs/wants?
- How urgent are they?
- How easy are they to implement?
- What are the available resources?

**HOW DO WE INCLUDE THESE FEATURES?**

- What do users expect? (UX)
- How do these features fit into the user flow? Streamlined? Intuitive?
- i.e. If you click on a traveling bus, can you see an icon of the bus being half-full so you know how full it is?

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**CONSIDERATIONS**

**NSF-REU Socially Relevant Computing**

- Address privacy concerns of Facebook with an “expiration date” for posts, so that they would be automatically removed at a given date.
- Recruited diverse participants; designed questionnaire to grasp their Facebook activity, impression of privacy online, social media sharing habits; gauged reaction to our solution to set expectations for execution

**MY PERSONAL EXPERIENCES**

Paperless Post: Product Management

- In charge of the iPad app pre-launch, and so I did a lot of iterative testing and debugging for the app.
- In the process of refining design and the user experience, I administered 12 user tests to identify what is intuitive and what is frustrating for users. The results of these tests ultimately helped to guide the app version now released in the AppStore.