

Interaction Design Capstone

Needfinding - Glance

Introduction

My work will be based on the Glance design brief. However, it will also touch some issues regarding Time and Change, the two other design briefs presented.

The goal is to understand, according to the different times of the day, the places where you are, and your habits, how can a smartphone dashboard help you improve, optimize and remove stress from your day-to-day living experience.

For that, I've planned to interview 3 persons, and since the observations could spread along different parts of the day, only the afternoon, after leaving the office, was observed by me. I left the office with each one of them in different days to perceive their behaviour. The analysis of the other parts of the day was done using diary studies, since I asked them to write down what they were experiencing.

Next I present the research done with Miguel, Paula and Hugo.

Miguel

Profile:

Miguel is a senior software engineer and commutes everyday by car. He parks 1km from the office and walks 10min to get there. He is 40, married and has 2 kids. He is “in charge” of the breakfast, backpack preparation, supermarket shopping and taking the kids to bed. He is a computer savvy and technology lover.

Observation:

After leaving the office, Miguel gets the phone and starts reading sites with sports news, mainly. After that he reads the traffic news to calculate the best way to go home and tries to estimate the time to be at home. He sends a SMS to his wife with the estimated time of arrival. This makes him walk slower to the car, that is parked 1km from the office, and sometimes he gets to the car and keeps standing outside reading and searching information before entering the car and driving home. At wednesday he drives to the supermarket before going home and checks the shopping list that his wife sent him during the day through skype messaging.

Interview/ questions about the observation:

“Miguel, for a student work, let me ask some simple questions”

Q: When was the last time you didn't use the phone after leaving the office? Why?

A: I can't remember... I always do that... Well, if I'm with low battery I rather save it for something important.

Q: I noticed some disruptions crossing the road, walking the park... avoiding collisions with trees... Why is that?

A: (laughs) Well... reading the phone and walking isn't something natural for a human you know! But I need that information. I need to keep up with the “internet”!

Q: How do you manage the supermarket list? Where do you keep it and how do you update it?

A: When my wife sends me shopping stuff on skype, I write it down on a post-it and bring it with me, on my pocket, to use at the supermarket.

“Thank you Miguel for your help, here, have a candy!”

Diary study:

- In the morning Miguel usually awakes by 7:30AM and the first thing he does is check the weather, the newspapers covers and the traffic for commuting. While preparing the breakfast for the kids he usually puts the phone on the kitchen table and whenever is possible he changes the sites, searches news, and gets irritated because his hands are covered with butter, bread, milk and the phone keeps getting dirty. On a normal day he has to get the rest of all the information he wanted while walking to the office, after parking the car.
- During lunch time, Miguel uses the phone to search for a good nearby restaurant if it is friday, because that's the week day for longer lunches with team mates. The rest of the week days he uses the phone to keep up with the news, while eating at the same old restaurant, the same old food (chicken and monday, codfish tuesday, tunafish wednesday and pork thursday).
- At night, Miguel usually checks the social networks to keep up with friends & family updates. He moves from facebook, to twitter and to email. When getting kids to sleep they spend a little time choosing the bedtime stories to tell. They frequently argue about which ones were used during the week, or which ones are always used, and they negotiate the new ones.

User needs:

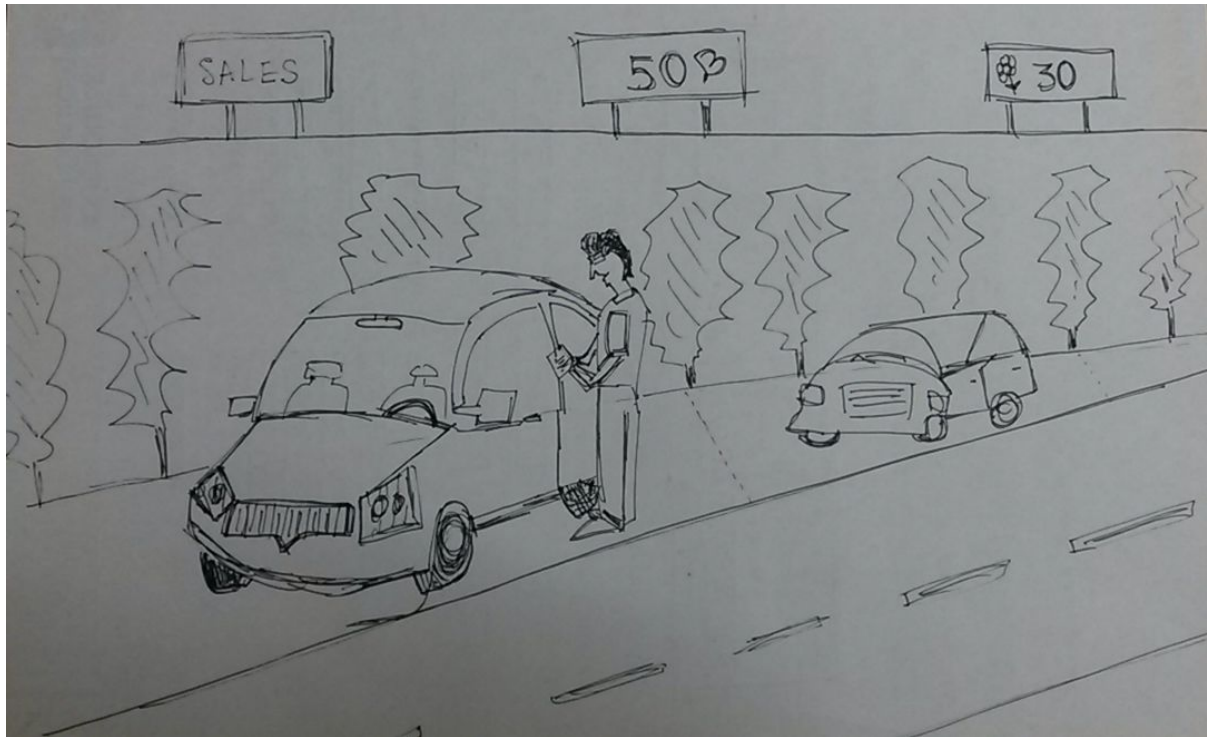
- I need to inform my wife about the time I'll be at home
- I need to know how traffic his when I leave the office
- I need to know the newspapers covers, the weather and the traffic every morning
- I need to hear the news while driving home, after leaving the office
- I need to know what products I have to buy for home
- I need to follow my sports team social networks and be aware of the latest news and game schedules
- I need to drive while I keep up with today news of my interest

Breakdowns & design opportunities:

- After leaving the office, there is too much time reading news and calculating times before entering the car to drive home
- While still sleepy/groggy, having to navigate through 3 different apps every morning, that are always the same apps
- Having to use hands to navigate and search for morning news sites, while preparing food and school backpacks for the kids
- Search a restaurant on every friday lunch takes too much time
- Eating the same on every weekday could not be healthy
- Too many apps and many clicks to check the same old friends and family for social updates
- Too many discussions about what stories to use, and which ones keep being repeated day after day. It seems hard to select different stories because nobody remembers clearly which ones have been used recently

- Drive and keep up with matters of interest

Sketch:



Nevertheless being always in a hurry, Miguel stands too much time near his car, just checking latest news because he knows that as soon as he enter the car he will not be able to keep up to that information. Will a readable smartphone dashboard will improve is experience of driving home while keeping up to what he wants to know? Something like, he enters the car and connects the phone to the car audio system and activates the reading feature of the dashboard.

Paula

Profile:

Paula is a Technical Writer in a software company. She is 30 years old and one kid. She gives a great importance to her family, and always motivates them to stay together. She is a reader, in a way that she reads a lot of books. Sometimes she is lost on what books she should read next. She tries hard to maintain an agenda and accomplish every planned tasks. Technology is a plus, but not essential. Every day she is “in charge” of the dinner.

Observation:

Paula commutes by bus, so as soon as she leaves the office she goes to the bus stop. There she uses her smartphone to check latest photos to send to her family. She also updates the books that she have read and searches for new books to read next. In the bus

she tries to take a seat, and when that is possible she sends some of the latest photos to family and friends. Nevertheless it's hard to manage which photos have already been sent, and to whom. She searches for suggestions for dinner, but she has to be careful not to repeat the recent meals.

Interview/ questions about observation:

"Paula, for a student work, let me ask you some simple questions"

Q: "What kind of photos do you usually send and to whom?"

A: "Well, I send photos of the kids, the dog, the meals I prepare, the places and the nice things I visit during the weekends. I send them to my sister, my aunt, and my father mostly."

Q: "Why don't you use a social network to publish those photos? It would be much more easy to share and manage which ones have been sent"

A: "I don't trust on social networks in a way that I don't know who really sees my photos, so I prefer to send them via media SMS message. It would be nice to have a fast way to send photos without searching first. Something like "send my recent photos to the ones I love" if the photos are of a certain kind that I usually send.

Q: "Tell me about the dairy experience of thinking about what to do for dinner"

A: "Hardest task of the day. A real pain in the neck since it's hard to avoid monotony and preparing always the same meals. I usually use the commuting on the bus to try to figure out, using the internet, to find the meal of the day. My husband has diet issues so I can't do everything that comes to my mind, I have restrictions".

"Thank you Paula, here you have a candy!"

Diary study:

- In the morning Paula first worry is send a message to her father and wait for the answer to see if he is ok. He is very old and lives alone. Her husband prepares the breakfast so she has a little time for checking her agenda and think and organize which tasks should be done first. This takes her some effort.
- At lunch Paula takes the phone to the restaurant to again plan her tasks in the agenda. She takes some pictures to send later to her family. She searches some books to read later.
- At night Paula takes care of the dinner and hopefully she gets a suggestion from some internet site. She spends some time on this because she has to remember what were the last meals to avoid repetition. Later she sends some photos to her beloved ones, trying not to repeat the last ones.

User needs:

- I need to ping my father every morning
- I need to know if there is too much time I don't share photos with my family
- I need someone to manage my agenda and organize what I should be doing
- I need to know what to cook every dinner, so I don't have to think

Breakdowns & design opportunities:

- Every morning she pings her father by SMS and waits for the answer to verify if he is ok. She writes always the same message and receives the same answer.
- Always with a tight agenda, she worries about planning what is the best task to do next, in order to reduce stress and achieve happiness.
- She frequently checks the last time she send photos to her family, if too much time has passed they might feel sorrow. She has to check which photos were sent and when to send new things every once and then.
- What books should she reads next? She has to check her notes to see what have been read and what is planned for the future
- Have automatic and great suggestions about what to cook today

Sketch:



While commuting home by bus, Paula sometimes don't get a seat. Since the dinner is an important task, she has to manage to get a suggestion for dinner and even standing up tries to use her phone. But searching and browsing requires advanced manipulation that a smartphone dashboard with dinner suggestion according to last meals will not need, and will improve a lot her life.

Hugo

Profile:

Hugo is a doctor and he is known among friends as the “sporty doc”. He is 40 years old, married with one kid. He takes good care of his health, by taking a restricted diet and doing plenty of exercise, mainly road cycling. He trains every morning at 6AM, at home during the winter, outside during the summer. He eats whatever he desires one day per week, breaking the tight diet. He is “in charge” of taking his daughter to school every morning. Hugo thinks that technology should be an extend of the human body.

Observation:

After leaving the office Hugo walks 50m to the garage and takes his car towards home or the gym. During the trip he connects the phone to the car internet system and sees the Strava site to keep up with friends new runs and times. If some record has been break, he calls some friends to talk about it. He checks the calories map for his day, to plan what to eat tomorrow. Sometimes this interferes with driving since Hugo has to select and switch sites to see all that he wants.

Interview/ questions about observation:

“Hugo, for a student work, let me ask you some simple questions”

Q: “Why do you need to be aware of records on strava?”

A: “Well, you now, this is stronger than me. It’s the adrenaline of having to be better every day. It’s great to challenge my friends to beat my records, and vice-versa”.

Q: “What are the major changes when you go to the gym instead of home, after leaving the office?”

A: “When I go home I usually call my wife to manage dinner, the kid’s bath, and some other logistic. If I go to the gym I check my gained calories during the day and the lunch I’ve had, so that I can plan the exercise to do”.

Q: “How do you record the calories and what you have eat along the day?”

A: “I take notes on the phone. Which sometimes reveals a pain in the neck, because it takes too much time, and writing on the smartphone isn’t for me that have big fingers. (laughs)”.

“Thank you Hugo, here have a candy!”

Diary study:

- In the morning Hugo awakes before 6AM and goes to his morning training. That could be running or cycling outside, if summer, or cycling inside if winter. By 730AM

he reads the cycling news, and checks the weather while breakfasting with his daughter. Sometimes it's hard to find the good site to see the best forecast. His wife leaves to work after he finishes his training. Usually he gets some 5min to check stava records, and searches new roads to cycle. If it is winter and he trains indoor, he likes to see the cyclic news on the phone while cycling on the indoor spin bike.

- At lunch Hugo reads his notes on the smartphone, the calories map, and calculates where is the best place to eat today. He checks the history of latest eaten foods, to try to wide the type of ingredients that he eats. Important: If he decides that today is the day of "eating whatever I feel like of the week", he takes a note of it on the phone also. He also takes notes of what he is eating today.
- At night Hugo checks the social networking of close friends and family and posts his last roads records, paths, times and photos, so that everyone else can keep up with his sports achievements. He needs to know if new roads are being tested, and if someone has beaten any of his records.

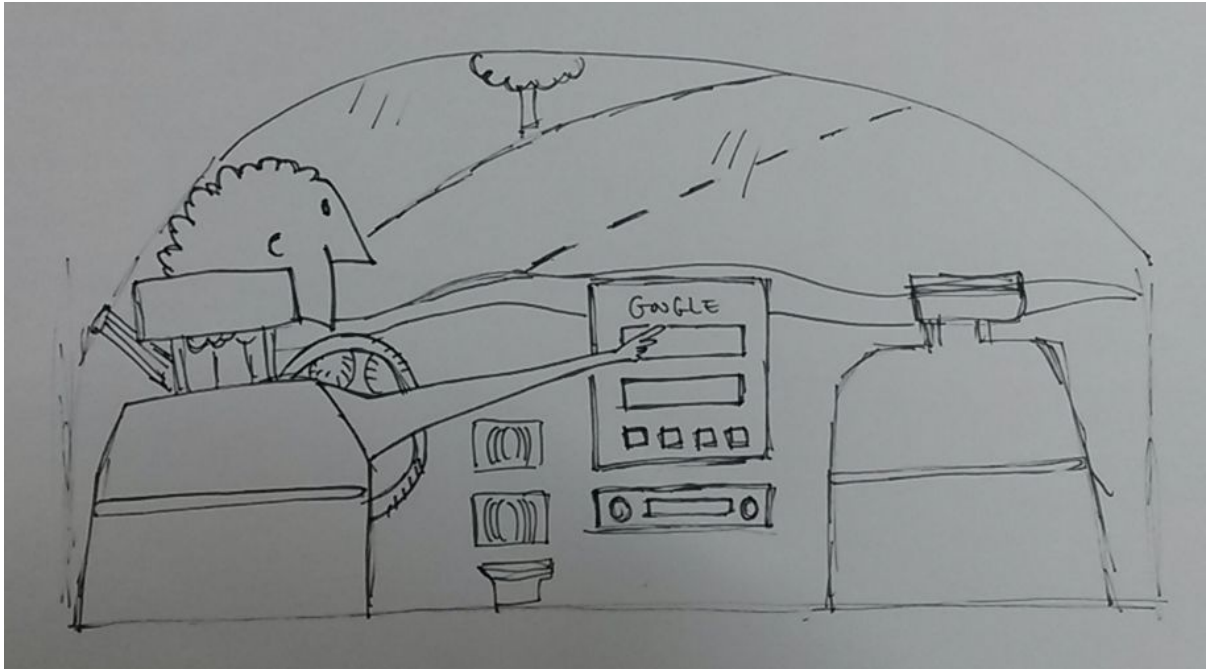
User needs:

- I need to know what to eat and where every lunch time
- I need to know the latest types of meals I've had
- I need to easily record all the meals I have
- I need to know if any of my records have been beaten
- I need to know where my greatest competitor is cycling today
- I need to know if my best friend has updates on social network channels
- I need to drive while keep up with my stuff of interest

Breakdowns & design opportunities:

- After leaving the office there is too much information checking while driving. It seems dangerous and drifts attention to internal car system LCD instead of the road.
- When going to gym, planning the correct exercise demands knowledge of current day calories, foods and moods. It seems complicated and time consuming.
- During the morning, reading news, weather and searching new roads in 5min seems to few time and stressing
- While cycling in the indoor spin bike, it's hard to read the news of a small screen like the smartphone
- Having to keep checking Strava, to know when one of his records has been beaten, could be time consuming and stressing
- Writing notes with "big fingers" isn't easy. If that is a frequent day action, it's annoying!
- Drive and keep up of matters of interest

Sketch:



After leaving the office, commuting home or gym, Hugo has to drift his attention from the road to the car LCD in order to switch and select the various applications and sites he wants to browse. If the smartphone dashboard (which has the glance of Hugo's information) could be projected on the car LCD, passing the various news and updates like a carrousel, Hugo would never have to use his hands to select options or sites.