Interaction Design Capstone

Week 8 - Test your prototype

This document contains:

1. Application description
2. Develop a protocol
3. Watch people use your prototype
4. Development plan
5. Redesign for A/B experiment

1.Application description

Summary description

Based on design brief "glance", this app shows the right information at the right time. It has a dashboard where we can see several boards. Each board is configurable and selected by the user from a "board store". I named it @Glance.

Example

For example: Traffic board appears on the dashboard first screen, by the morning, between 7AM and 9AM. It shows the traffic reports from my home to my work. It appears on the dashboard again at the time I usually leave the office, 6PM. Nevertheless, at wednesday, I don't go home after work, I go to the gym, so I configured the board to show me the traffic to the gym, instead of home.

Extra functions

I've included screen reader capability, and screen projector (display the content on a wall). These have revealed important for some personas. Resulting from the user interviews earlier on this project, I've also investigated some voice commands support.

For example, the "restaurant board" appear near lunch time, suggesting nearby restaurants according to my diet plan. To improve the experience with this board, and allways have the best suggestions to eat, I would like to give input to it, just by saying: "today I'm eating fish". This will improve the tomorrow suggestions. From the board point of view: "if yesterday was fish, today I'm gonna suggest meat to the user".

Alarms can also be helpful. Using this "restaurant board" example, an alarm could be: "You've been eating meat for a very long days, it's time to have a different thing".

Boards

These boards doesn't exist, I know. Maybe we could start by using some web site content to display as boards… Maybe we can develop these boards and create a "@Glance board store".

2.Develop a protocol

1. Preparation and setup
   a. Prepare inVision prototype
   b. Share the mobile link and run it on a smartphone
   c. Use a smartphone to present the app to the participant
   d. Use paper and pen to take notes
2. Thank the participant for being available to perform the usability test
3. Present the consent form and ask to sign it
4. Steps & roles to perform the test
   a. Explain what this app is for: @Glance is a mobile app that presents information that really matters to you, according to the time of the day. For instance, in the morning the app shows you the weather, the traffic to commute and the newspapers headlines. The main screen is a dashboard, with a set of boards, each one is configurable, installable and refers to a certain subject: news, sports, restaurants, traffic, bedtime stories, etc.
   b. Explain what they are asked to do: You start the application with already a set of boards, and we ask you to:
      i. Configure the weather board to show a certain city forecast
      ii. Delete the weather board
      iii. Add a new shopping item to the shopping list board
      iv. Configure when the shopping list board should appear on the dashboard (time of the day, when you're near a supermarket, etc)
      v. Add a new board to the dashboard
      vi. Use help
5. During your participation you are free to speak while using the app, we are not testing you, we are testing the application usability. Think aloud, so that we can understand the pain points, your bumps, and take notes.
6. We will take notes of your participation
7. After the test we will ask the participant what was the global feeling of using the app and what actions he/she considers the most important to take in order to improve his/her experience
8. Again, thank the participant and offer a souvenir.

Participant Consent Form

The purpose of this usability study is to evaluate the design of the @Glance mobile app. We are interested in determining if people can accomplish common tasks and easily find information using this application. The session will not 'test' you or your ability, rather the session will test the application to provide information on areas that might be improved. Please be advised that there are no risks associated with participation in this session.
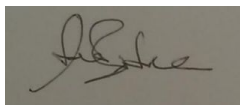
During this session, you will be asked to complete some tasks using the application. As you complete the tasks, members of the User Experience Group will observe and take notes. In addition, the session will be captured on video for future review. The session will last no longer than one hour and fifteen minutes.

If for any reason you are uncomfortable during the session and do not want to complete a task, you may say so and we will move on to the next task. In addition, if you do not want to continue, you may end the session and leave at any time.

Approximately 2 people will participate in this study. Results from all sessions will be included in a usability report to be presented to the team. Your name will not be included in the report nor will your name be associated with any session data collected.

If you wish to speak with someone about your participation in this study, or if you feel you were not treated as described above, please contact the User Experience Group manager at 812-855-4499.

I, Armanda Silva, have read and fully understand the extent of the study and any risks involved. All of my questions, if any, have been answered to my satisfaction. My signature below acknowledges my understanding of the information provided in this form and indicates my willingness to participate in this user testing session. I have been given a blank copy of this consent form for my records.

Signature:

Date: 2016-07-14

Participant Consent Form

The purpose of this usability study is to evaluate the design of the @Glance mobile app. We are interested in determining if people can accomplish common tasks and easily find information using this application. The session will not 'test' you or your ability, rather the session will test the application to provide information on areas that might be improved. Please be advised that there are no risks associated with participation in this session.

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If you wish to speak with someone about your participation in this study, or if you feel you were not treated as described above, please contact the User Experience Group manager at 812-855-4499.

I, Serafim Amanhã, have read and fully understand the extent of the study and any risks involved. All of my questions, if any, have been answered to my satisfaction. My signature below acknowledges my understanding of the information provided in this form and indicates my willingness to participate in this user testing session. I have been given a blank copy of this consent form for my records.

Signature:

Date: 2016-07-14

3. Watch people use your prototype

Prototype used on the tests

(I've moved it to a web site to prevent inVision from stopping it to work, since I need to use inVision for the updated prototype, and the free account only allows one prototype at once)

Link: http://217.199.187.190/ricardomaduroweb.com/@Glance_week7/index.html#/screens

Prototype updated according to tests results

Link: https://invis.io/B47YUQDN9

List of changes

- Help is not clear, change the location and icon to the bottom toolbar near the other actions
- Home shortcut is not clear on top under "@Glance". Maybe with colors would be easier, but it's better to change it to a shortcut on the bottom toolbar
- Back button could be replaced by swipe right. Not implemented yet.
- When viewing a board on full screen, be able to interact with it, for instance, allow add a new item if in a grocery list board, instead of entering settings to perform that.
- When viewing a board on full screen, click the board to access settings
- Show alarms only on the dashboard. If an alarm occurs when viewing another screen, toast a message with the alarm. There is no need to have the alarms shortcut always available.
- Remove a board holding it for X seconds, instead of accessing settings to remove a board. Not implemented yet.
- Clarify global settings from board settings. Don't mix both on the same screen, separate the two things according to user's current context.

Photos
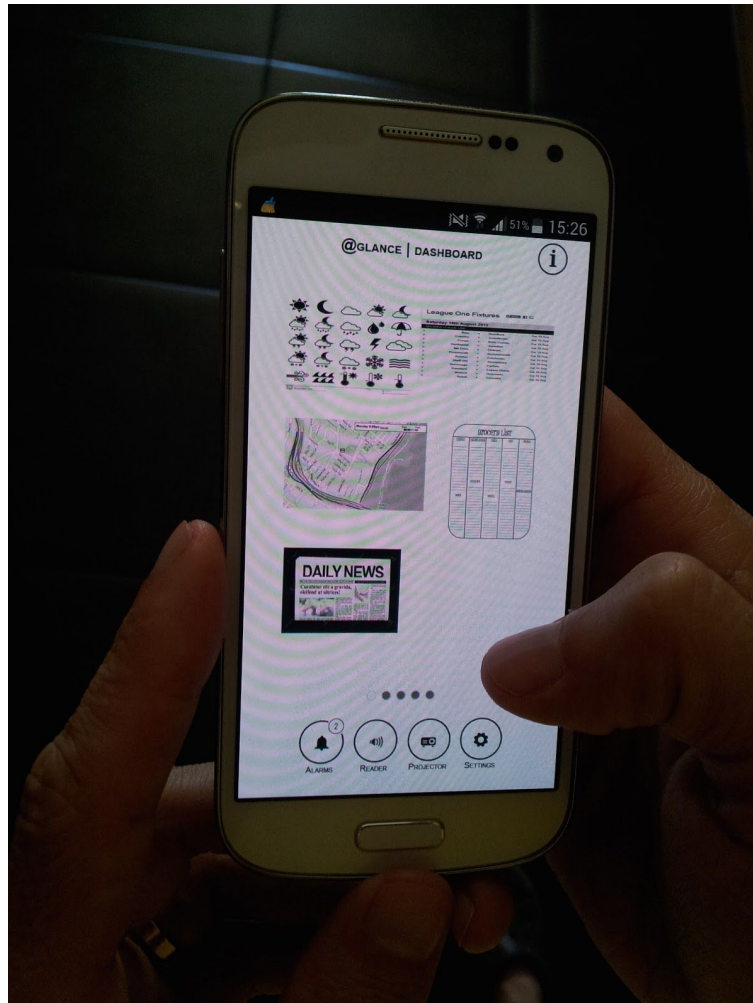
User trying to access the help, to understand what kind of app is this and what does it offer. The top right icon (i) was not clear. The user asked for a better shortcut to access help.

This user felt a little lost in the navigation and confused about the global and specific settings. He tried to use many gestures, like swipe left, right, up, down, that were not implemented in this prototype. The positive feedback was that the information architecture was easy to understand, despite that complexity around setting that I mentioned before.
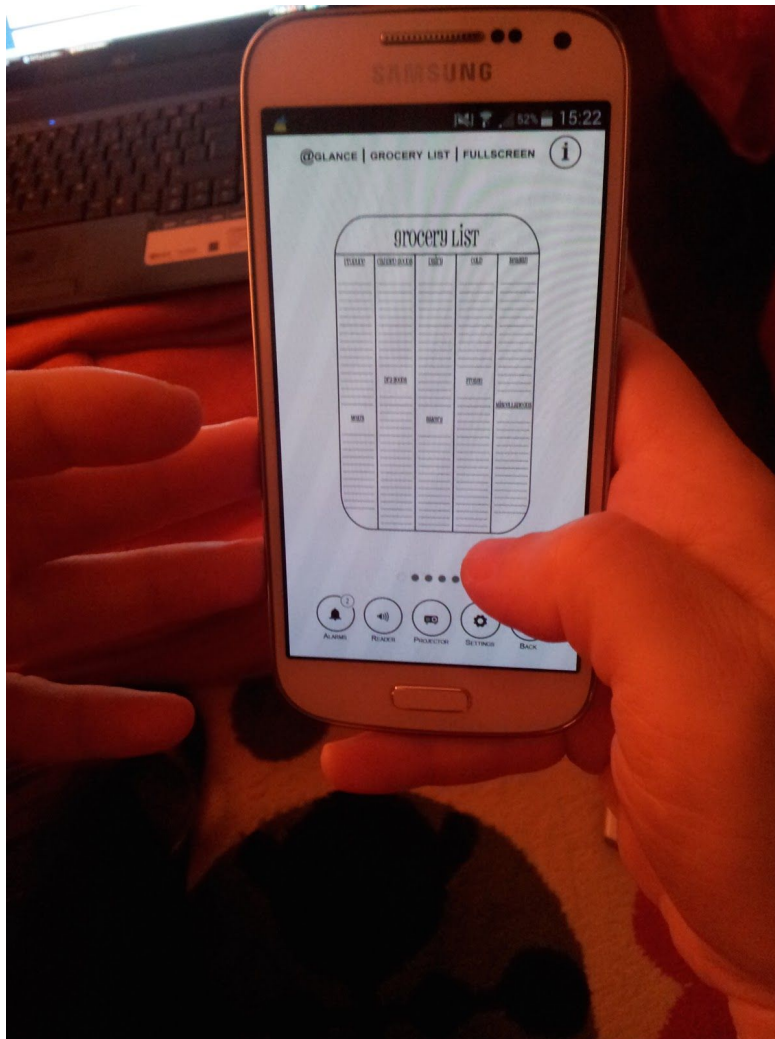
User trying to find a way to add an item to the grocery list board. Currently that can be done using the settings, but the user felt that it should be easier, meaning that the action should be available on the current bottom toolbar.

This user gave many advanced suggestions regarding fast and quick usage of the app. They were quite interesting since I've never thought about them. This user suggested also that I change the location of the "Go back to dashboard" shortcut.

4. Development plan

Last week

Link:

Snapshot:

Week	Task	Due	Status	Comments	Estimated hours	Actual hours spent
week 7: ready for testing	display several boards on the dashboard screen	12-07	Done		1	3
	display global settings to configure @glance app	12-07	Done		1	3
	display board settings to allow configuration of board	12-07	Done		1	3
	display dashboard fullscreen with one board	12-07	Done		1	3
	display screen to allow add of board do dashboard	12-07	Done		1	3
	create alarms screen and display alarms	12-07	Done		1	3
	create screen to set board about user habits	12-07	Done	Set weather locations and set show schedule	1	3
	display action for projection of screen	12-07	Done	Create a floating button for that	1	3
	display action for reading current screen	12-07	Done	Create a floating button for that	1	3
	display help / FAQ screen	12-07	Done	Show some help content explaining the app	1	3
	create interactive prototype using invision	12-07	Done	join all screens to create a complete interactive prototype	4	4
Weekly Summary		18/07/2016	Ok		14	34
week 8: test your prototype	develop a protocol	24-07-2016			8	
	find 2 testers	24-07-2016		search people at home or at work	8	
	perform the first usability test	24-07-2016			3	
	adjust design according to first test	24-07-2016		re-design according to user feedback	3	
	perform the second usability test	24-07-2016			3	
	compile results	24-07-2016		process the results from the usability tests and create changes to be applied	8	
	re-design for A/B testing	24-07-2016		select a component to re-design and submit to A/B testing	8	
Weekly Summary	Weekly Meeting Time:			Project Status	41	
week 9: results	Learn how to use google analytics	07-08-2016			4	
	Find 20 testers	07-08-2016		Search on social media and email address book	4	
	Launch AB testing with google analytics	07-08-2016			8	
	Compare rates online	07-08-2016			8	
	Discuss findings from the chi-square	07-08-2016		can you draw solid conclusions or are additional experiments needed? What changes would you make based on these results? What other things would you test in the future?	8	
	Fit and finish	07-08-2016		Concentrate on completing the changes based on the results of your in-person test. Attention to detail will serve you well. Make sure the app is optimized for the mobile interface. Same drill as the other weeks, keep updating your development plan.	8	
Weekly Summary	Weekly Meeting Time:			Project Status	40	0
week 10: show & tell	Create medium post	14-08-2016			16	
	Create video demo	14-08-2016			16	
	Publicize work	14-08-2016			8	
Week Summary	Weekly Meeting Time:			Project Status	40	0
Constraints	Summer vacations			I'll make a trip for 2 weeks to south Portugal		
	Kids school vacations			During 3 weeks, I'll have to take care of them all day, at home		

	Current job load			If the day at work is exhausting, I'll have less time to work on this at night		
Stretch goals						
Save users habits by recording most used boards positions						
Allow voice input for recording habits						
Screen projection (on wall)						
Screen reading						

Updated development plan

Link:
https://drive.google.com/open?id=1xQ6Sxw6W_l47iUP0oAZR6sUGjCKA-D9EBVEGsQ1CTLY

Snaphsot:

Week	Task	Due	Status	Comments	Estimated hours	Actual hours spent
	Plan for interactive prototype: Provide a detailed plan for the next three assignments, and briefly summarize goals for the final assignment.					
week 7: ready for testing	display several boards on the dashboard screen	12-07	Done		1	3
	display global settings to configure @glance app	12-07	Done		1	3
	display board settings to allow configuration of board	12-07	Done		1	3
	display dashboard fullscreen with one board	12-07	Done		1	3
	display screen to allow add of board do dashboard	12-07	Done		1	3
	create alarms screen and display alarms	12-07	Done		1	3
	create screen to set board about user habits	12-07	Done	Set weather locations and set show schedule	1	3
	display action for projection of screen	12-07	Done	Create a floating button for that	1	3
	display action for reading current screen	12-07	Done	Create a floating button for that	1	3
	display help / FAQ screen	12-07	Done	Show some help content explaining the app	1	3
	create interactive prototype using invision	12-07	Done	join all screens to create a complete interactive prototype	4	4
Weekly Summary		12/07/2016	Ok		14	34
week 8: test your prototype	develop a protocol	15-07-2016	Done		8	4
	find 2 testers	15-07-2016	Done	search people at home or at work	8	4
	perform the first usability test	15-07-2016	Done		3	4
	adjust design according to first test	15-07-2016	Done	re-design accordintg to user feedback	3	4
	perform the second usability test	15-07-2016	Done		3	4
	compile results	15-07-2016	Done	process the results from the usability tests and create changes to be applied	8	4
	re-design for A/B testing	15-07-2016	Done	select a component to re-design and submit to A/B testing	8	8
Weekly Summary		15-07-2016	ok		41	32
week 9: results	Learn how to use google analytics	07-08-2016			4	
	Find 20 testers	07-08-2016		Search on social media and email address book	4	
	Launch AB testing with google analytics	07-08-2016			8	
	Compare rates online	07-08-2016			8	
	Discuss findings from the chi-square	07-08-2016		can you draw solid conclusions or are additional experiments needed? What changes would you make based on these results? What other things would you test in the future?	8	
	Fit and finish	07-08-2016		Concentrate on completing the changes based on the results of your in-person test. Attention to detail will serve you well. Make sure the app is optimized for the mobile interface. Same drill as the other weeks, keep updating your development plan.	8	
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	Current job load			If the day at work is exhausting, I'll have less time to work on this at night		
Stretch goals						
Save users habits by recording most used boards positions						
Allow voice input for recording habits						
Screen projection (on wall)						
Screen reading						

5. Re-design for A/B experiments

Prototype used on the tests

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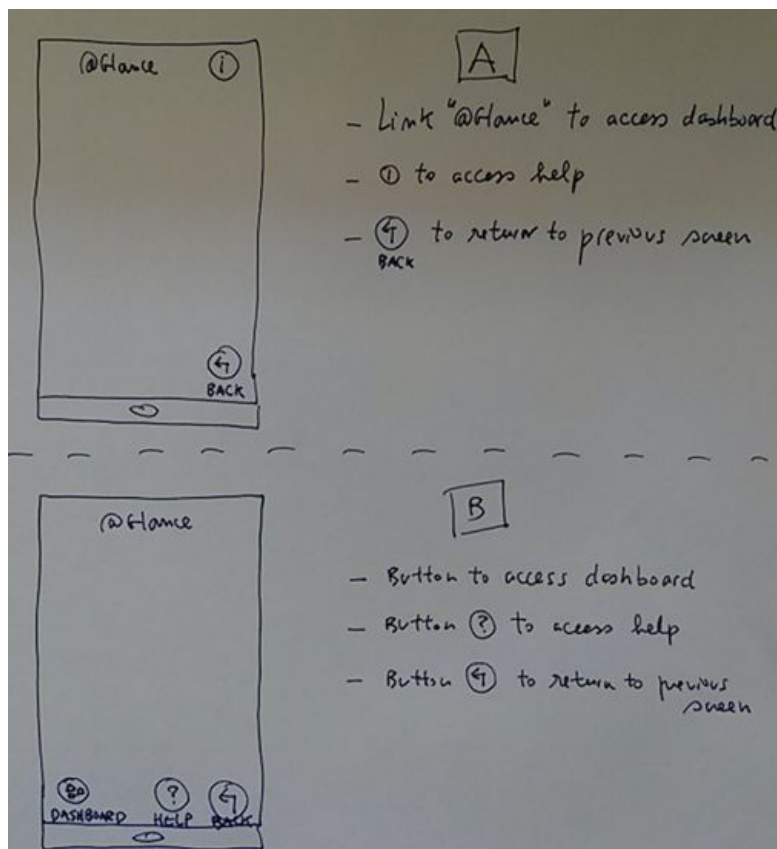
Link: http://217.199.187.190/ricardomaduroweb.com/@Glance_week7/index.html#/screens

Prototype updated according to tests results

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Alternative design

The picture below represents A and B versions, regarding what changes from A to B.

Planned online test

Submit a description of the online test you will run for the next assignment. How will you measure your manipulation? What are the possible outcomes and their interpretations?

There are two situations that I would like to A/B test:

- Help on top with (i) vs Help on bottom with (?)
  - I'd like to know if people find help useful, just by clicking on it and counting how many clicks were made among the 20 users
  - I'd like to know if (A) in the case of help on top with (i) icon, if people find it better than (B) on the bottom toolbar and with icon (?). Counting the clicks will give me an answer about which version is more friendly to use
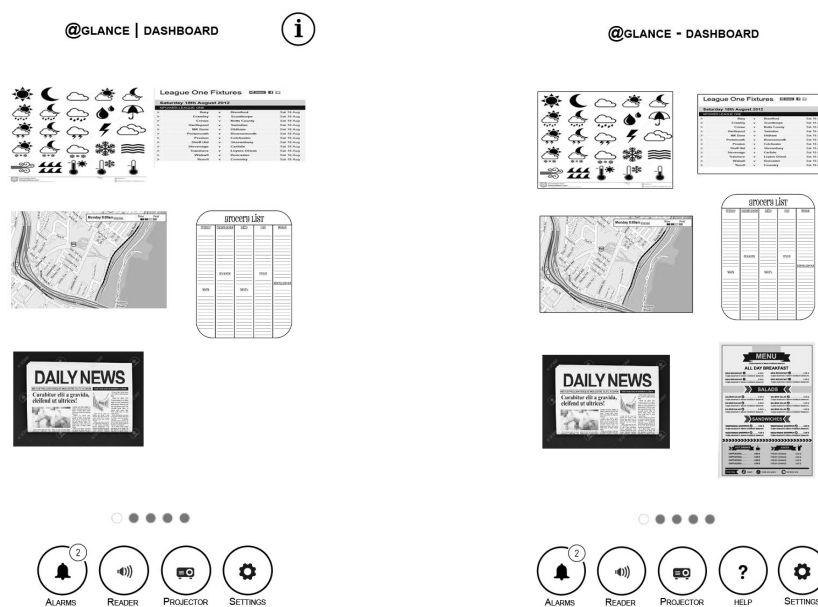
Left image (A): Help on top; Right image (B): Help on bottom

- How to return to dashboard, and what's the best shortcut: on top (@Glance) as link, or on bottom as a button
  - I want to know if the user uses the back button to return to the dashboard, even if it has to click it several times, no worrying about finding a better shortcut
  - I want to know if users find the "go to dashboard" shortcut that can be: (A) on top under "@Glance" label; (B) on bottom as a clear button of the toolbar "dashboard".
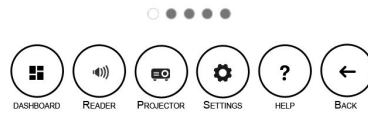
Jun 27, 2012

5:20 pm

14°C

ALARMS   READER   PROJECTOR   SETTINGS   BACK

Jun 27, 2012

5:20 pm

14°C

INSERT ILOCATION TO ADD TO LIST   ADD

DASHBOARD   READER   PROJECTOR   SETTINGS   HELP   BACK

Left image (A): Use back button until reach dashboard of top label/link "@Glance"; Right image (B): Use back button to go to dashboard or dashboard button, from the bottom toolbar