**ASSIGNMENT 2: CONTEXTUAL INQUIRY** 

YU-TAI CHEN, CHENGZE QIAN, BOJUN XU
Interface Improvement for Cars.com
Mobile App

## INTRODUCTION

## **Cars.com Mobile App**

## Starting point of the design

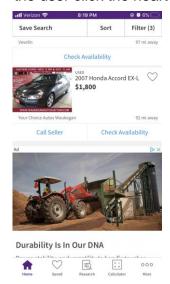
Our design is to make Cars.com mobile app more credible and convenient to use. The purpose of this app is to get the optimal car for its users. With recent updates, however, users cannot access to what they need in a straightforward manner. The flow of the app can be improved from many aspects such as the filter, 'Saved' button and advertisements position...

#### **Current state-of-the-art**

The traditional way for people to find their ideal cars requires them to go from store to store which take times and efforts. Currently, with the help of search engines like "Cars.com", we can search for detailed information and locate the available car easily. The platform had created a brand-new business model of the car market.

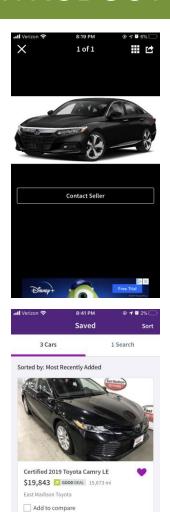
### **Potential problems**

- When selecting multiple items in a specific filter category, the condition is always 'OR'. If the user wants all the features(AND), the search process will take more times
- The car photo is relatively small(about 1/3 of the screen). This may confuse the users since they cannot see the details of the car clearly
- The 'Compare' function does not show enough details about the cars(photos on the top are always unavailable)
- Users may miss click the advertisements in the search tab since those ads take up many spaces and are placed in the middle of searches
- The only way to save/delete the car from the 'Saved' tab is through the heart-like button. Users without experiences may be confused by the symbol, a text prompt might be better here
- Users have to register an account to use the 'Save' function, but it is not notified until the user click the heart-like button.



The advertisements place in the middle of search.

# INTRODUCTION



The car photo is only 1/3 of the screen (can't magnify)

'Saved' tab doesn't tell how to delete/modify saved cars

## **Design opportunities**

(877) 289-6155

- Allow users to select the conditions(i.e. AND/OR) when picking multiple features
- Optimize the 'Compare' interface to provide detailed information
- Move the advertisements to a more user-friendly place.
- Clarify the 'Save' (heart-like) button a little more
- Prompt account registration for users who use the app for the first time
- Optimize the photos of car in the information tab

Assignment 2: Contextual Inquiry

## UNDERSTANDING

## **User End Description:**

**1st Task:** The user needs to find the two cars <u>specified below</u> and add both cars to the "Saved" tab. \*The user should check the car information to ensure that it meets the requirement exactly.

**2<sup>nd</sup> Task:** The user is then required to compare and pick the one that he/she <u>likes the</u> <u>most</u> under "Saved" tab(The user should check the photos of the car if available).

**3<sup>rd</sup> Task:** The user should remove the 'less favorite' car from the "Saved" tab.

#### Car Info:

First car: Toyota Camry

Second Car: Honda Accord

**Requisites**: 1) <u>2018/2019</u> model 2) <u>100</u> miles from the location(<u>ZIP Code 53715</u>)

3) <u>Black</u> exterior color 4) <u>Keyless start</u> **AND** <u>Moonroof</u> feature

5) mileage under 20,000 miles

6) cheapest of all

### **Detailed Operation List:**

#### First task steps:

- Starting with open the app
- Sign up for an account in the "More" tab(Otherwise you cannot save cars to the "Saved" tab)

Note: The account doesn't require email verification, so any email is OK

- Start searching the Toyota Camry in the Home tab
  - Use the filter function to get the requisites
  - Click the 'Search' button
  - Click the 'Sort' button and sort by 'Lowest Price'
  - Find the first car in the search list that fulfills the requirements and click the Heart-like button next to it
- Start searching the Honda Accord in the Home tab (Same operations as first car)
- Go to the Saved tab, tick the box next to 'Add to compare' for both cars

### Second & third task steps:

- Click the 'Compare' button at the bottom
- Check and decide which car is the favorite
- Click the heart-like button again for the less favorite one to remove it from the 'Saved' tab
- Complete the tasks, exit the app

# UNDERSTANDING

#### **Problems Identified:**

- Filters are locked(can't be changed) after click search
- The compare tick box is not obvious enough.
- There are no photos in the compare tab
- The advertisements are placed in weird position
- The login tab is problematic since the text box is too small to enter texts
- The filter does not support 'AND' condition
- There is no way to delete multiple 'Saved' cars at the same time

#### **Process of Understanding:**

We did two interviews by entering their working environment and gather ideas and information from them.

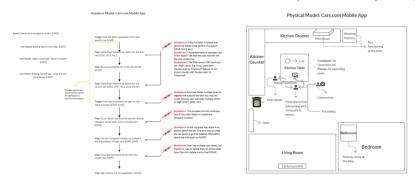




The first snapshot is from our first participant – Wood. He is considered as a novice since he only used the app for about 5 times before.

The second snapshot is from out second participant – Louis. He is currently worked as a salesman for a car company. Although he is familiar with 'Cars.com' website, he did not interact with the app very often.

We also draw out different models to help us identify the problem.

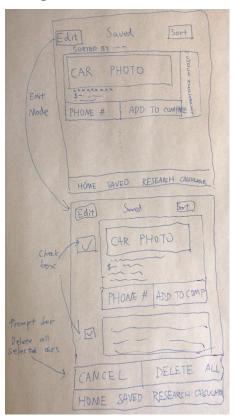


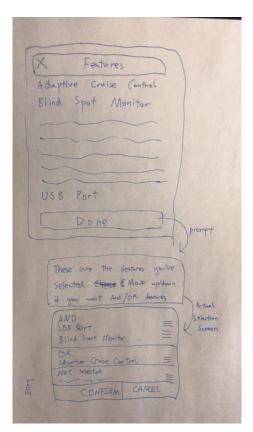
The sequence model helped us went through the process step by step and we found many breakdowns among those steps.

We also considered physical model an important one because we wanted to know whether there are environmental factors that might influence our participants.

## **IDEATION**

## Design ideas





After discussed as a group. We come up with several drafts that may become design opportunities.

In the first sketch, we created a new function to delete multiple cars in the 'Saved' tab. It also make 'Add to compare' more obvious so that the users will not get confused by the small tick box. The 'Check Availability' button will move to the right side. It will disappear once the user enter the 'editing' mode.

In the second sketch, we created a new function that let user select whether they want the feature to be 'OR' based or 'AND' based. After choosing all the features you want, the app will prompt a notification and then guide you to a small interface. Users can move features up and down to either 'AND' or 'OR' condition.

Besides those, we also discussed where to put the advertisement so it will not cause mis-click problems by our users. We felt that the advertisements should appear once the user open the app. After that, there will be less ads in the 'Search' tab.

Some potential improvements include "making 'Compare' tab more detailed and descriptive", as well as "getting new design for the login/register prompt".

Assignment 2: Contextual Inquiry

# CONCLUSION

## **Contextual Inquiry Summary**

After doing the contextual inquiry, we acquired deeper knowledge to the app and have a better understanding to what needs the users have. It also promoted us to come up with new ideas and any potential improvements to the app.

We started the process by conducting our interviews(Feb 10<sup>th</sup>). We found two participants that understand the basics of 'Cars.com' mobile app. The participants told us their schedule and we went to their living places to record the video. During this step, our participants were observed carefully by us and we tried to understand their feelings. We analyzed the two participants and chose the one who came up with more ideas as our major user. Finally, we transferred the video to a transcript file.

We met the next day(Feb 11<sup>th</sup>) after finishing our interview so we still reserve memories about the conversation with our participants. During that day, we did the brainstorming for our affinity diagrams. We came up with different ideas and wrote them down to small stickers. We finally grouped them into categories and finish the diagrams.

On Wednesday and Thursday(Feb 12<sup>th</sup> & 13<sup>th</sup>), our group distributed the five models to each group members and drew them using computer software. We exchanged ideas and found many breakdowns during this step. We met on Friday(Feb 15<sup>th</sup>) for the last time to discuss the potential design ideas. We created several sketches which might improve the app and make it more user-friendly. We also discussed minor problems such as "whether the two participants could represent common users".

#### **Next steps**

Our next step is to design and make changes to the app at the prototype level. This means we will use paper or other sketching tools to make simple drafts. We possibly will first draw out ideas on paper. And then, we will use computer software like AdobeXD to refine our sketches. We will share ideas online and try to come up with final versions of our design ideas to the app. The interface at that time should be completed and also allowed the users to try out our "updates" and perform tasks.