

Human Computer Interaction CS449 – CS549

Assignment-3 Cognitive Modeling in HCI

Students will use CogTool to produce a Keystroke-Level Model of a skilled user buying a food via mobile application.

Due date – Upload to SUCourse by April 21th Sunday, **Midnight (Late submission will not be accepted)**

Deliverables: Report (you may include any supporting figures, diagrams, graphics, photographs, sketches etc. ~2-3 pages) and **CogTool project file**

Grading: 10 points

Objectives

- To learn to model task execution behavior of a skilled user with CogTool.
- To practice making predictions of task execution time and use them to focus design effort.

Directions

- This is an individual homework so do it by yourself.
- Get the modeling tool, CogTool, and its Tutorial and User Guide from www.cogtool.org
- Mobile app images you will need for this homework are available in SUCourse

Compare & Contrast two online shopping applications

You will be modeling a skilled user ordering “Big Mac menu” from “YemekSepeti” and “Trendyol Go” on a mobile phone. Procedures related with given screens for this shopping task are as follows. Assume that the application is open.

Order on Yemeksepeti

1. Click on the search field.
2. Search for “big mac” and tap on the search button.
3. scroll down to see Big Mac menu (Under the Mcdonald’s).
4. in the next page scroll down to see menu selection and choose “orta”.
5. Select “patates kızartması” for the fries (Orta Boy Patates/Salata).
6. For the drinks select Coca-Cola (Orta).
7. Scroll down to see sauce selection.
8. For the first sauce choose NO (first option).
9. For the second sauce read options till you see NO and choose NO.
10. Scroll down the page to see promotions.
11. Select no for promotion sauce.
12. Select no for promotion dessert.
13. scroll down the page to see promotion and choose No.
14. click on Add to cart.

Order on Trendyol Go

1. click on the search field.
2. Search for “big mac.”
3. Select the “big mac” as the first recommendation below the search bar.
4. Select the big mac menu.
5. On the menu page scroll down to see customization options.
6. Select “menu tercihi”.
7. Select “orta” and the next field will open.
8. For the drinks, read and scroll down till you see “Coca-Cola” and select it.
9. For the fries choose the first option.
10. For the promotion sauce choose the first option.
11. For the second promotion sauce choose the first option.
12. For the promotion dessert choose the first option.
13. For the promotion select the first option.
14. Click on the add to basket.

What will you do?

Build a project with CogTool that can execute this procedure using the given images. (NOTE: You will NOT need any images other than the ones given)

Make sure you think hard about the types of widgets you use. Keep the table of widget types (**Appendix B in the User Guide**) open and next to you when you are doing this assignment and refer to it often. Consider all the widget types; don’t just pick the first one that looks like it might work.

Build a project that has all the widgets necessary to do this task. Create a task called “Ordering Big Mac menu”, demonstrate how to do this task, and get a prediction of how long it will take for Yemeksepeti and Trendyol Go.

Your report must include the following sections and answer the questions:

1. Which shopping procedure is faster, **Yemeksepeti or Trendyol Go**?
2. Why is the faster procedure faster?

Answer this question by referring to CogTool’s models , and also readings (week-5 and week-6), NOT just common sense. Use the scripts that CogTool generates or the visualizations of the scripts and refer to things you see in those parts of CogTool to explain *why* the faster procedure is faster. Feel free to include pictures in your report if it is easier for you to explain your reasoning using pictures.

3. How can you make the slower procedure faster? How much time can a user save with this change? Show it by modeling the revised one with CogTool.

4. References

Important Information

CogTool doesn't propagate changes to designs after you have already demonstrated scripts.

- If you change the design after demonstrating a script, you **MUST** delete the script and demonstrate the task again to give accurate predictions – fortunately, it's fast to demonstrate tasks.

Deliverables

- Create project folder with the following title:

CogTool HW <LastName>_<FirstInitial>

For example, Ali Tan's folder would be called

CogTool HW Tan_A

This folder contains two files:

1. A CogTool Project file (.cgt) with the following title:
 <LastName>_<FirstInitial>_HW.cgt
2. Attach a report file that answers the questions, presents and justifies your design.
 Name this file with the following title:
 <LastName>_<FirstInitial>_HW

- Create zip file from project folder with the following title:

CogTool HW <LastName>_<FirstInitial>.zip

- Upload your zip file to SUCourse

Grading will be based on:

- Incorrect file names
- A CogTool Project file that doesn't run
- Incomplete set of frames in the design
- Unreasonable/Missing types of widgets in the frames
- Unreasonable/Missing transitions between frames
- Unreasonable/Missing scripts
- Unreasonable/Shallow answers to the questions without references to the resources