Team Sisyphus

Heuristic Evaluation

Presented by:
Paul Booth, Gwynneth Davidoff, Shane Moon, Scott Thomson

We have used Nielsen’s *Ten Usability Heuristics* to evaluate your first prototype. We have done the evaluation separately, before discussing as a group and combining the violations into the following list. We have also prepared summary data as well as our individual evaluations in an appendix. If you have any questions, please feel free to reach out to us through email or in class.

Compiled Heuristic Violation List

1. [H1 Visibility of System Status] (Severity 0)
   On the express ordering screen, after I click pay and swipe my card, it didn’t take me to the confirmation screen right away. I think I had to click pay multiple times. This is more of a software bug than an actual interface issue.

2. [H4 Consistency & Standards] (Severity 0)
   Which page? ‘Express Menu’
   What? The button that leads a user to ‘Express Menu’ says ‘X-PRESS,’ while the title of the actual page is ‘Express Menu.’

3. [H4 Consistency & Standards] (Severity 0)
   Which page? ‘Express Menu’ and ‘Drive Thru’ page
   What? In the ‘Drive Thru’ page, the ‘Pay Now’ button and the label that calculates the total bill are separated, while they are contained in the same button in the ‘Express Menu’ page. Consider separating them.

4. [H10 Help and documentation] (Severity 0)
   Maybe hovering should bring up help dialogues.

5. [H7 Flexibility and efficiency of use] (Severity 1)
   It would be nice to have the ability to add a "person" to the order.

6. [H4 Consistency and standards] (Severity 1)
   [Link](http://hfid.olin.edu/sa2012/sngr3220-sisyphus/prototype/express.html) shows the string “Swipe Card for Previous Orders” while [Link](http://hfid.olin.edu/sa2012/sngr3220-sisyphus/prototype/custom_order_welcome.html) shows “Swipe Card to find previous orders.” I don’t think this will confuse users too much, but they should be standardized if they are doing the same task.

7. [H6 Recognition rather than recall] (Severity 1)
   The custom order welcome page has a Swipe Card to find previous orders button, but this requires the user to recall what they ordered last with that card. This is particularly a problem with a user with more than one card, or for someone that does not remember the last order that
was made, but it was large one that requires pressing back on the next page followed by the
custom order button to get a clear list of food to buy.

8. [H8 Aesthetic and minimalist design] (Severity 1)
The custom order page includes the word "Menu" very largely in the top left with white text on a
maroon box. This word does not seem to add any information, but it is distracting and takes up
space for more people icons, or helpful text explaining what to do.

9. [H8 Aesthetic and minimalist design] (Severity 1)
On the custom order screen, the price only shows one decimal place if it ends in a zero.
(i.e. "$20.9" instead of "$20.90").

10. [H8 Aesthetic and minimalist design] ( Severity 1)
On the custom order screen, if one person orders large number of items in a particular
configuration, sometimes the icons don't resize properly (usually the water bottle).

11. [H4 Consistency and standards] (Severity 1)
There are rounding errors in some of the costs, i.e. some have an extra .000000...001 in them.

12. [H4 Consistency and Standards] (Severity 1)
In the split page, when you click pay by cash it asks for a card. This doesn't seem very serious,
but is potentially confusing as cash is not paid using a card...

13. [H7 Flexibility and efficiency of use] (Severity 1)
A nice add-on to the drive-through section would be to do a similar thing to the express menu,
quick-click once to get the item up to the first "person." It creates a connection between the two
interfaces, and allows for a faster and more streamlined experience for expert users.

14. [H10 Help and documentation] (Severity 1)
Which page? The page that comes after clicking 'Swipe Card to find previous orders.'
What? A once-in-a-while-user might be surprised to see that his or her orders are pre-filled,
unless a user clearly remembers what he or she has bought before. It might be nice to place a
text that says ‘These are the items that you bought previously.’

15. [H7 Flexibility and efficiency of use] (Severity 2)
Which page? The page that comes after clicking 'Split the Bill.'
What? If a user clicks 'Split the Bill,' we can assume that each person will want to pay only for
the items that he or she intended to buy. Under this assumption, we can increase the efficiency
of use by auto-filling the 'Pay w/ Card # x' boxes in the page that comes after clicking 'Split
the Bill.' In this way, users do not need to perform unnecessary drag-and-drop multiple times.
(Users already drag-and-dropped the food items in the previous page).

16. [H4 Consistency and standards] (Severity 2)
Weird error...moving an item from one "person" to another makes it jump to the next space.

17. [H7 Flexibility and efficiency of use] (Severity 2)
The custom order welcome page has two buttons for swiping a card or entering a custom order
from scratch. However, this requires an extra screen and click/tap for the user. The following
screen does not have any interaction for swiping your card, which would make the finding of last
orders no slower and would make creating a new order more efficient.
18. [H4 Consistency and standards] (Severity 2)
The express ordering and the custom ordering include wildly different interfaces for placing an order. If the same task is being done, either similar interfaces should be used, or at least similar gestures (tapping in express vs. dragging in custom.)

19. [H10 Help and documentation] (Severity 2)
The custom order screen contains food icons that need to be dragged to the icons of people at the top of the page. This is not an intuitive interaction to place an order, and it is not clear why there are more than a single icon at the top, or if there is a difference between dragging food to the leftmost one or the one in the middle. There should be some helpful text that only appears on this page to tell the user what to do.

20. [H3 User control and freedom] (Severity 2)
On express page, when checking the number of items that I want, if I press the button too many times, I have to cancel my order and start all over. This could be frustrating if I was inputting a large order before accidentally pressing a button to enter the state that I did not intend. Currently, pressing cancel requires then pressing the pay button, which goes to the next window, but I think this is a feature that just is not included in the prototype.

21. [H4 Consistency and standards] (Severity 2)
During the custom ordering screen, there are three people icons at the top to which the user must drag items. These icons are not draggable or re-orderable, but the split bill pay page has the same icons, with the foods not druggable and the icons druggable, which is confusing for the user when the same icons have different behaviors on drag.

22. [H5 Error prevention] (Severity 2)
The split bill pay screen allows the user to drag different people to different boxes to pay different amounts. The user is able to drag an icon to a box, pay, then have that icon still around and draggable, including to another box where the price is updated with the price of the food for that icon, no longer paid. The icon should be marked as paid, grayed out, and not be able to be dragged once paid for, so the user is not in a state of error where they must pay for their food twice.

23. [H3 User control and freedom] (Severity 2)
There is no way to go back to the first page, which seems like it's based on the real-world case of actually driving through, but it means that when you're testing the only way to get back to the start is to go back through a whole bunch of pages, so I would recommend adding a back button to those pages, even if they somehow have the caveat that they wouldn't exist outside a prototype.

24. [H4 Consistency and standards] (Severity 2)
Why does "swipe card" button on the second page (the one that says "Welcome") go to the normal menu screen? If it's meant to do the same "previous order" thing the express line does, you should probably add the same example that exists in that part of the prototype.

25. [H7 Flexibility and efficiency of use] (Severity 2)
I guess it's nice that there's the ability to customize an item, but I'm not sure it's easy enough to find. It's such a core functionality for orders since people use it all the time, maybe there should be another visible way to customize that would eventually no longer be used once people come
across the double click customization.

26. [H3 User control and freedom] (Severity 3)  
After selecting Drive-thru, the user has no way of going back if they intended to go to the express. This is bad if the user did not intend to press the Drive-thru button, and there is no way to easily change to the familiar express interface.

27. [H2 Match between system and the real world] (Severity 3)  
On the custom order screen, after hitting "Swipe Card to find previous orders", it only shows me my most recent order. I would have expected it to show me a list of my previous orders and allow me to select one.

28. [H3 User control and freedom] (Severity 3)  
On the express menu, there is no way to remove an individual item from the order. I thought that clicking on an item might remove it from the order, but instead it adds more of those items. The only way to undo this is to remove all items and start over. If I've already spent time putting a big order together, having to start over would be very frustrating.

29. [H4 consistency and standards] (Severity 3)  
There's no way to cancel an order like there is in the express line. I think it's probably more of a minor major problem than a genuinely major problem, but that sort of functionality really should be available to both groups.
## Summary

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Appendix

Evaluator: Paul Booth

1. [H4 Consistency and standards] (Severity 1)
   http://hfid.olin.edu/sa2012/s_engr3220-sisyphus/prototype/express.html shows the string “Swipe Card for Previous Orders” while http://hfid.olin.edu/sa2012/s_engr3220-sisyphus/prototype/custom_order_welcome.html shows “Swipe Card to find previous orders.” I don’t think this will confuse users too much, but they should be standardized if they are doing the same task.

2. [H3 User control and freedom] (Severity 2)
   On express page, when checking the number of items that I want, if I press the button too many times, I have to cancel my order and start all over. This could be frustrating if I was inputting a large order before accidentally pressing a button to enter the state that I did not intend. Currently, pressing cancel requires then pressing the pay button, which goes to the next window, but I think this is a feature that just is not included in the prototype.

3. [H3 User control and freedom] (Severity 3)
   After selecting Drive-thru, the user has no way of going back if they intended to go to the express. This is bad if the user did not intend to press the Drive-thru button, and there is no way to easily change to the familiar express interface.

4. [H4 Consistency and standards] (Severity 2)
   During the custom ordering screen, there are three people icons at the top to which the user must drag items. These icons are not draggable or re-orderable, but the split bill pay page has the same icons, with the foods not draggable and the icons draggable, which is confusing for the user when the same icons have different behaviors on drag.

5. [H5 Error prevention] (Severity 2)
   The split bill pay screen allows the user to drag different people to different boxes to pay different amounts. The user is able to drag an icon to a box, pay, then have that icon still around and draggable, including to another box where the price is updated with the price of the food for that icon, no longer paid. The icon should be marked as paid, grayed out, and not be able to be dragged once paid for, so the user is not in a state of error where they must pay for their food twice.

6. [H6 Recognition rather than recall] (Severity 1)
   The custom order welcome page has a Swipe Card to find previous orders button, but this requires the user to recall what they ordered last with that card. This is particularly a problem with a user with more than one card, or for someone that does not remember the last order that was made, but it was large one that requires pressing back on the next page followed by the custom order button to get a clear list of food to buy.

7. [H7 Flexibility and efficiency of use] (Severity 2)
   The custom order welcome page has two buttons for swiping a card or entering a custom order from scratch. However, this requires an extra screen and click/tap for the user. The following screen does not have any interaction for swiping your card, which would make the finding of last orders no slower and would make creating a new order more efficient.

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The express ordering and the custom ordering include wildly different interfaces for placing an order. If the same task is being done, either similar interfaces should be used, or at least similar gestures (tapping in express vs. dragging in custom.)

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The custom order screen contains food icons that need to be dragged to the icons of people at the top of the page. This is not an intuitive interaction to place an order, and it is not clear why there are more than a single icon at the top, or if there is a difference between dragging food to the leftmost one or the one in the middle. There should be some helpful text that only appears on this page to tell the user what to do.

10. [H8 Aesthetic and minimalist design] (Severity 1)
The custom order page includes the word "Menu" very largely in the top left with white text on a maroon box. This word does not seem to add any information, but it is distracting and takes up space for more people icons, or helpful text explaining what to do.
Evaluator: Scott Thomson

1. [H9 Help users recognize errors] (Severity 4)  
On the custom order screen, it is very unclear that the user needs to drag the food onto the person icon to order. Once I figured that out, the system was intuitive and made sense, but it took me multiple visits to the screen before I discovered it. Same goes for the payment screen, but at that point I knew to try dragging the people right away. It would be great if there were feedback when the user clicked on an item.

2. [H2 Match between system and the real world] (Severity 3)  
On the custom order screen, after hitting "Swipe Card to find previous orders", it only shows me my most recent order. I would have expected it to show me a list of my previous orders and allow me to select one.

3. [H3 User control and freedom] (Severity 3)  
On the express menu, there is no way to remove an individual item from the order. I thought that clicking on an item might remove it from the order, but instead it adds more of those items. The only way to undo this is to remove all items and start over. If I've already spent time putting a big order together, having to start over would be very frustrating.

4. [H4 Consistency and standards] (Severity 2)  
On the express ordering screen, clicking on a menu item adds it to the order. On the custom order screen you have to drag the item to a person, and clicking on a menu item does nothing.

5. [H8 Aesthetic and minimalist design] (Severity 1)  
On the custom order screen, the price only shows one decimal place if it ends in a zero. (i.e. "$20.9" instead of "$20.90").

6. [H8 Aesthetic and minimalist design] (Severity 1)  
On the custom order screen, if one person orders large number of items in a particular configuration, sometimes the icons don't resize properly (usually the water bottle).

7. [H1 Visibility of System Status] (Severity 0)  
On the express ordering screen, after I click pay and swipe my card, it didn't take me to the confirmation screen right away. I think I had to click pay multiple times. This is more of a software bug than an actual interface issue.
Evaluator: Gwynneth Davidoff

1. [H3 User control and freedom] (Severity 2) There is no way to go back to the first page, which seems like it's based on the real-world case of actually driving through, but it means that when you're testing the only way to get back to the start is to go back through a whole bunch of pages, so I would recommend adding a back button to those pages, even if they somehow have the caveat that they wouldn't exist outside a prototype.

2. [H4 Consistency and standards] (Severity 1) There are rounding errors in some of the costs, i.e. some have an extra .00000...001 in them.

3. [H4 Consistency and standards] (Severity 2) Why does "swipe card" button on the second page (the one that says "Welcome") go to the normal menu screen? If it's meant to do the same "previous order" thing the express line does, you should probably add the same example that exists in that part of the prototype.

4. [H7 Flexibility and efficiency of use] (Severity 2) I guess it's nice that there's the ability to customize an item, but I'm not sure it's easy enough to find. It's such a core functionality for orders since people use it all the time, maybe there should be another visible way to customize that would eventually no longer be used once people come across the double click customization.

5. [H4 Consistency and Standards] (Severity 1) In the split page, when you click pay by cash it asks for a card. This doesn't seem very serious, but is potentially confusing as cash is not paid using a card...

6. [H4 consistency and standards] (Severity 3) There's no way to cancel an order like there is in the express line. I think it's probably more of a minor major problem than a genuinely major problem, but that sort of functionality really should be available to both groups.

7. [H4 consistency and standards] (Severity 3) Why does the express have such a different interface? I kind of get the idea that the way things are selected is more streamlined and the idea of multiple "people" per order is unnecessary, but I think that having two completely different interfaces gets in the way of a smooth experience for repeat customers.

8. [H7 Flexibility and efficiency of use] (Severity 1) Building off of 7., a nice add-on to the drive-through section would be to do a similar thing to the express menu, quick-click once to get the item up to the first "person." It creates a connection between the two interfaces, and allows for a faster and more streamlined experience for expert users.

9. [H4 Consistency and standards] (Severity 2) Weird error...moving an item from one "person" to another makes it jump to the next space.

10. [H3 User control and freedom] The menu page needs an undo, even if it's off to the side and unused once people figure out how to take food off the "people."

11. [H10 Help and documentation] (Severity 0) Maybe hovering should bring up help dialogues...though there is very little that really needs explanation or help...it's essentially all self explanatory.

12. [H7 Flexibility and efficiency of use] (Severity 1) It would be nice to have the ability to add
a "person" to the order.

I would also like to say how much I really liked your interface. My first time through, I was kind of mad at you guys because I had no idea what on earth I was supposed to point out that needed fixing. Then I got really picky, but almost everything I noticed falls under the category of not really necessary. In general, your interface is clever, easy to use, and very clear. Very good job.
Evaluator: Shane Moon

1. **[H10 Help and documentation] (Severity 3)**
   **Which page?** Any page that contains drag-able items.
   **What?** A user might not be able to recognize that the items are drag-able, and that he or she has to drag and drop an item into a certain area in the screen. This issue can be fixed either by placing an instruction text (i.e. ‘Drag and drop the items here’) somewhere in the screen, or by providing more visual clues. This issue is very critical because a user might not be able to interact with the system at all if he or she fails to find out that items are movable.

2. **[H5 Error prevention] (Severity 2)**
   **Which page?** The page that comes after clicking ‘Split the Bill.’
   **What?** A user can move the items around even after paying for the items. If an already-paid item is moved into a new box, the ‘Pay Now’ button is re-activated, which means a user will have to pay for the items again in order to finish transaction.

3. **[H7 Flexibility and efficiency of use] (Severity 2)**
   **Which page?** The page that comes after clicking ‘Split the Bill.’
   **What?** If a user clicks ‘Split the Bill,’ we can assume that each person will want to pay only for the items that he or she intended to buy. Under this assumption, we can increase the efficiency of use by auto-filling the ‘Pay w/ Card # x’ boxes in the page that comes after clicking ‘Split the Bill.’ In this way, users do not need to perform unnecessary drag-and-drop multiple times. (Users already drag-and-dropped the food items in the previous page).

4. **[H5 Error prevention] (Severity 1)**
   **Which page?** The page that comes after clicking ‘Split the Bill.’
   **What?** When a user attempts to pay with cash by clicking the ‘Pay w/ Cash’ box, a dialog pops up and says ‘Please swipe your card to continue.’ This is a wrong instruction because this user wants to pay with cash. In addition, if a user clicks the ‘PAID’ button after his or her transaction, a dialog ‘Please swipe your card to continue’ pops up again. Since the user already finished this transaction, this dialog should not be visible.

5. **[H10 Help and documentation] (Severity 1)**
   **Which page?** The page that comes after clicking ‘Swipe Card to find previous orders.’
   **What?** A once-in-a-while-user might be surprised to see that his or her orders are pre-filled, unless a user clearly remembers what he or she has bought before. It might be nice to place a text that says ‘These are the items that you bought previously.’

6. **[H3 User control and freedom] (Severity 2)**
   **Which page?** ‘Express Menu’
   **What?** Currently the page only has the ‘Cancel’ button that clears up all the selections a user has made, and it does not have an ‘Undo’ button. Consider a case where a user made a minor mistake after selecting a large number of items – an ‘undo’ and a ‘redo’ button will be very useful.

7. **[H4 Consistency & Standards] (Severity 0)**
   **Which page?** ‘Express Menu’
   **What?** The button that leads a user to ‘Express Menu’ says ‘X-PRESS,’ while the title of the actual page is ‘Express Menu.’
8. [H4 Consistency & Standards] (Severity 0)
Which page? ‘Express Menu’ and ‘Drive Thru’ page
What? In the ‘Drive Thru’ page, the ‘Pay Now’ button and the label that calculates the total bill are separated, while they are contained in the same button in the ‘Express Menu’ page. Consider separating them.