

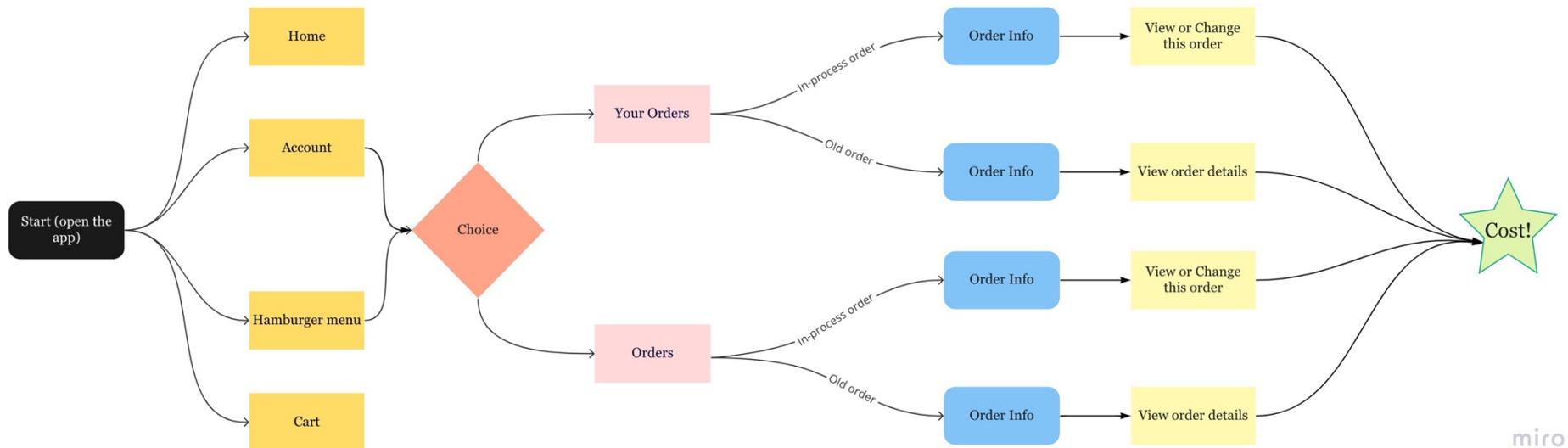
# Case Study

## GUI Bloopers

Cognitive load is the amount of information the brain can process at one point in time – more formally, the capacity of working memory that can be allotted to the task at hand. When there is too much to handle, it is called cognitive **overload**. Ideally, the best user experiences are ones where the cognitive load is optimal (read: minimal).

In this case study, I attempt to suggest changes to the interface of an app that poses a potential cognitive overload to the user/customer (me). The goal was to navigate to the “Orders” page and find the cost of an order.

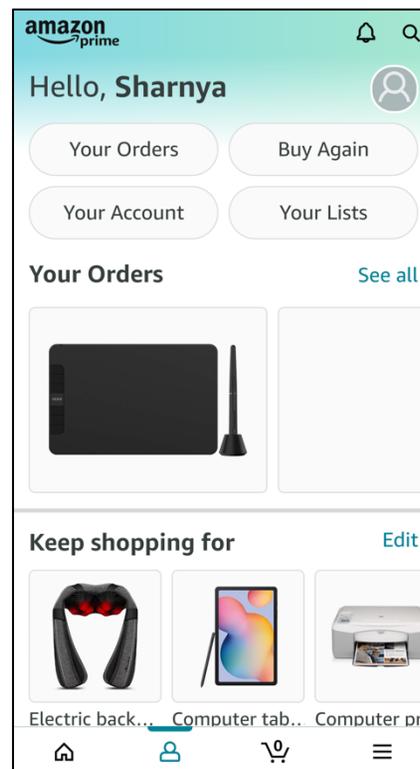
### User flow:



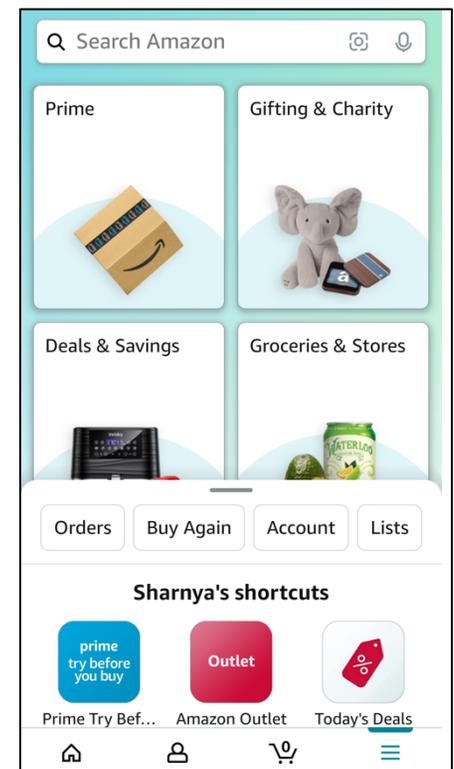
App screenshots:



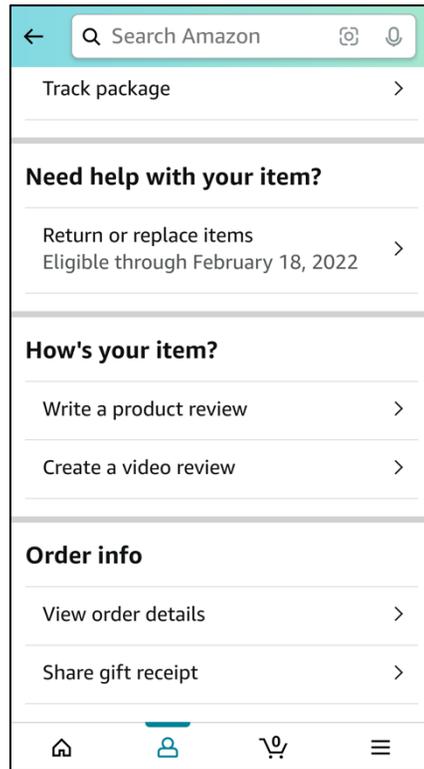
(A) Home page



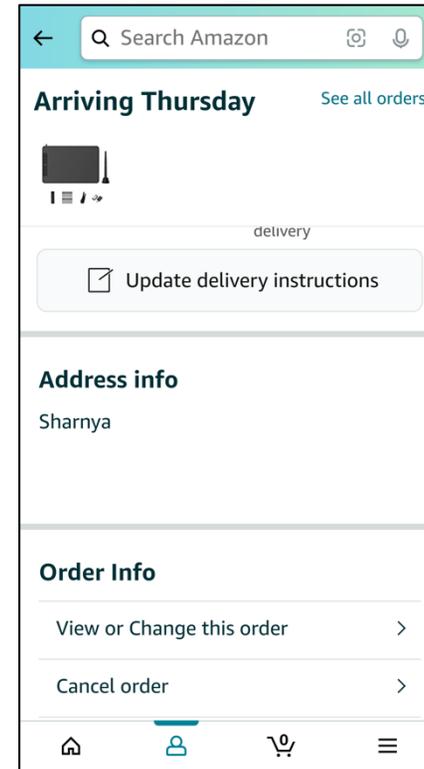
(B) Account page



(C) Hamburger Icon Menu



(D) Select old order

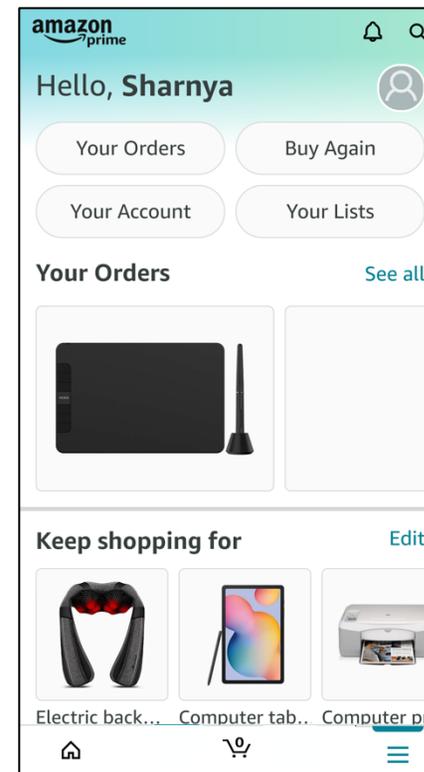


(E) Select order in-process

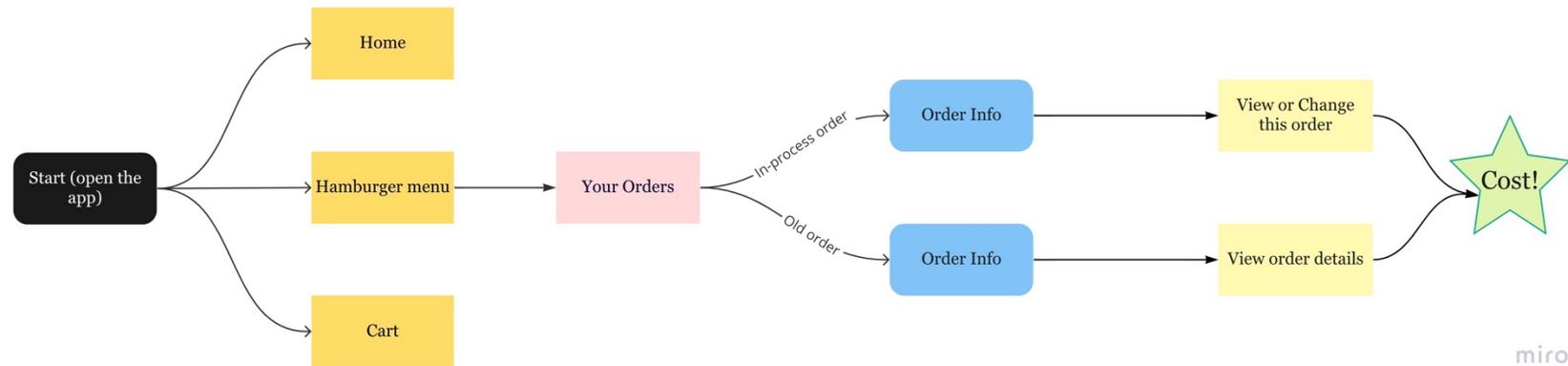
Problems faced by the user:

1. There is more than one way to reach the end goal – too many stimuli can be confusing.
2. The redesigned version of the app came with the latest update. The previous version had a completely different layout, and in the name of a design overhaul, the intuitiveness and conventional expectations of a shopping app have been compromised.
3. Memory and association – the human brain learns behaviors by forming mental associations and connections and storing the learnt behavior in the brain. However, with many approaches to finding out the cost of an order, the task association with the goal is not achieved quickly.
4. Redundancy – The Account icon is redundant because opening the Hamburger menu also has an option to open the account.

I would suggest the following change in design to streamline the task further and make it easier for the user:



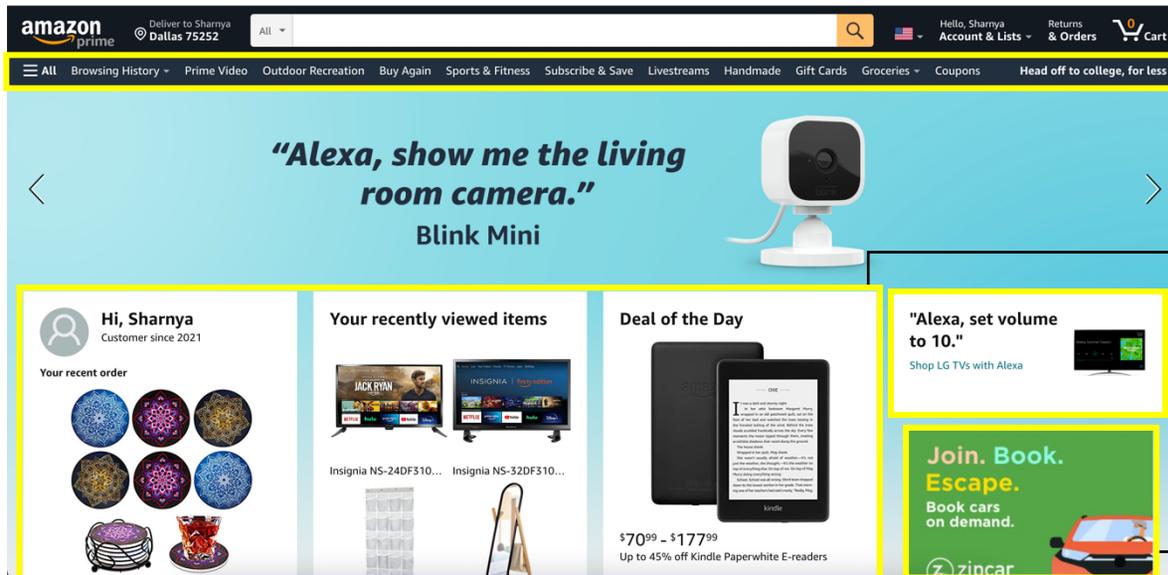
The change is simple – the bottom white task bar now only has 3 unique options – Home, Cart, and Hamburger (Menu). Within the Hamburger menu are the account settings and information. It would largely help decrease the user flow during the task, as shown in this illustration:



The Amazon desktop website interface has its own set of cognitive overload-inducing features as well. I have identified a few of them in the following pages and also suggested a potential solution.

The main issue lies with violations of the visual hierarchy principle – the human eye perceives visual stimuli based on different features and they are hierarchical, meaning one object gets more attention and priority than others. Eye tracking studies have also confirmed that the human eye scans information in a z-pattern. Hierarchy depends on several aspects – size of the object, color scheme, contrast, proximity, alignment, and white space to name a few.

Specifically in the case of this website, the hierarchy is confusing and is not immediately apparent. The use of negative space is also jarring due to the color combination.



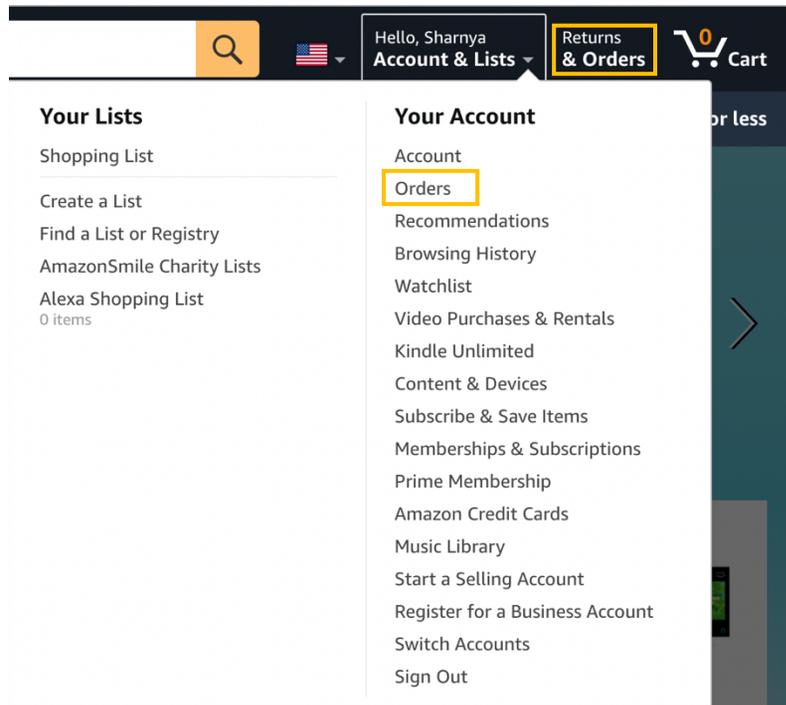
A confusing combination of direct hyperlinks and drop-down menus in no particular order – ex. 'Buy Again' is placed between 'Outdoor Recreation' and 'Sports & Fitness', 'Groceries' is a drop-down menu placed between two hyperlinks.

Three tiles related to different aspects of a typical e-commerce site – a user's recent orders, browsing history, and 'deal of the day' → The balance between trying to make a minimal design, yet provide information isn't achieved

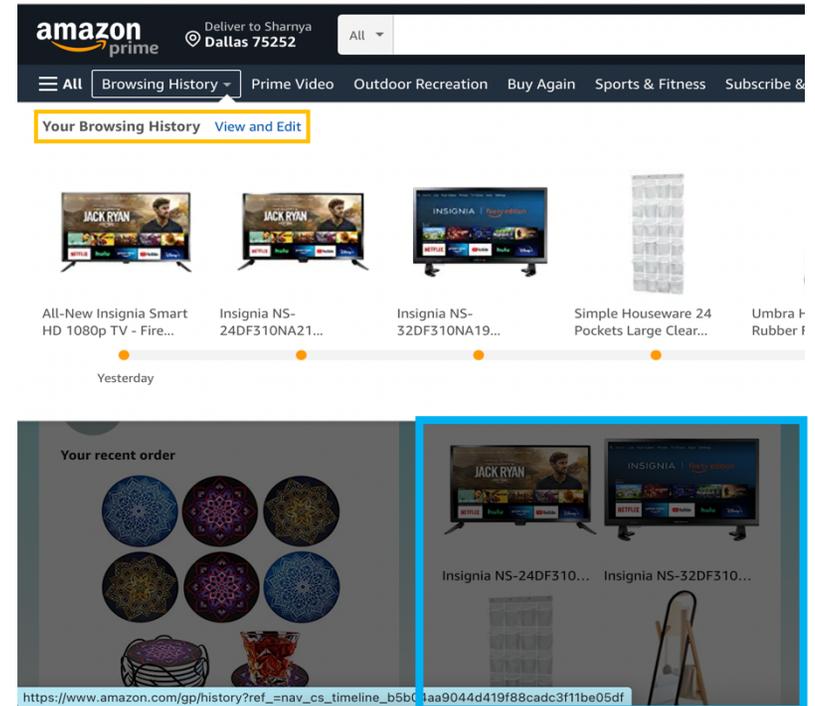
The purpose of this tile isn't clearly conveyed by the title, and it is not sized correctly (the tile below it is smaller)

Amidst all the 'important' information, lies an advertisement.

Homepage

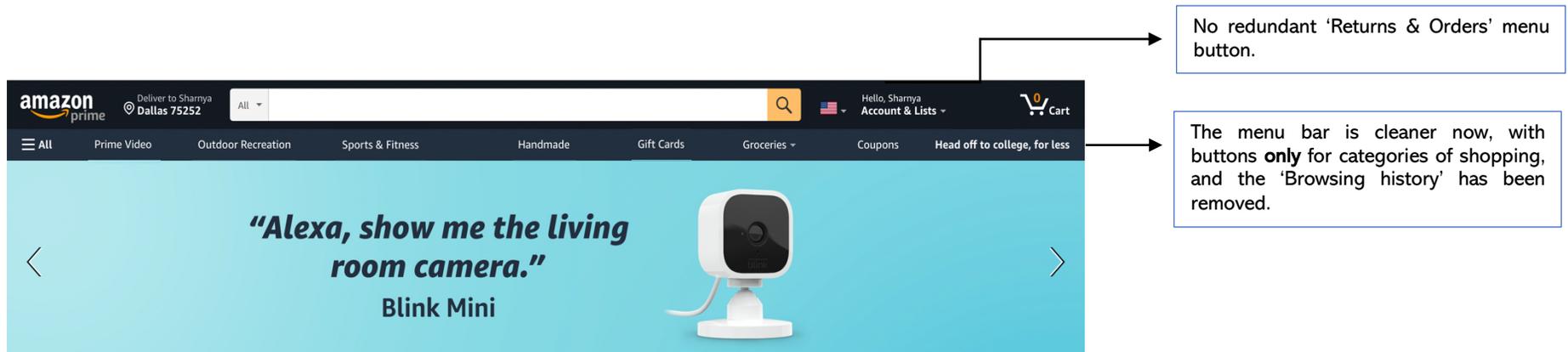


The option to go to the Orders page is given to the user in 2 menus placed one next to the other – the ‘Returns & Orders’ button could simply have been eliminated altogether. The option to return also appears in the ‘Orders page’. This can also lead to confusion in the user.



A classic example of redundancy – the ‘Browsing History’ drop-down menu displays exactly what is mentioned in the tile outlined in blue. There is no extra information about the first few products than what is already displayed on the homepage. The only addition is a few more products.

My suggestions:



The suggested layout removes the redundant options described in the previous page and makes the entire website pleasing to the eye. I have personally gotten confused with repetitive menu buttons on this website and felt that lesser text-based options would be nice. That could be achieved by replacing text-based menu options with tiny icons. The advertisement visible in the Homepage can be moved to another part of the screen, lower than the original placement. The most important thing for an online business is to keep the user engaged with the website and applying foundational UX research knowledge can help achieve the objective without overloading the customer/user with a lot of stimuli.