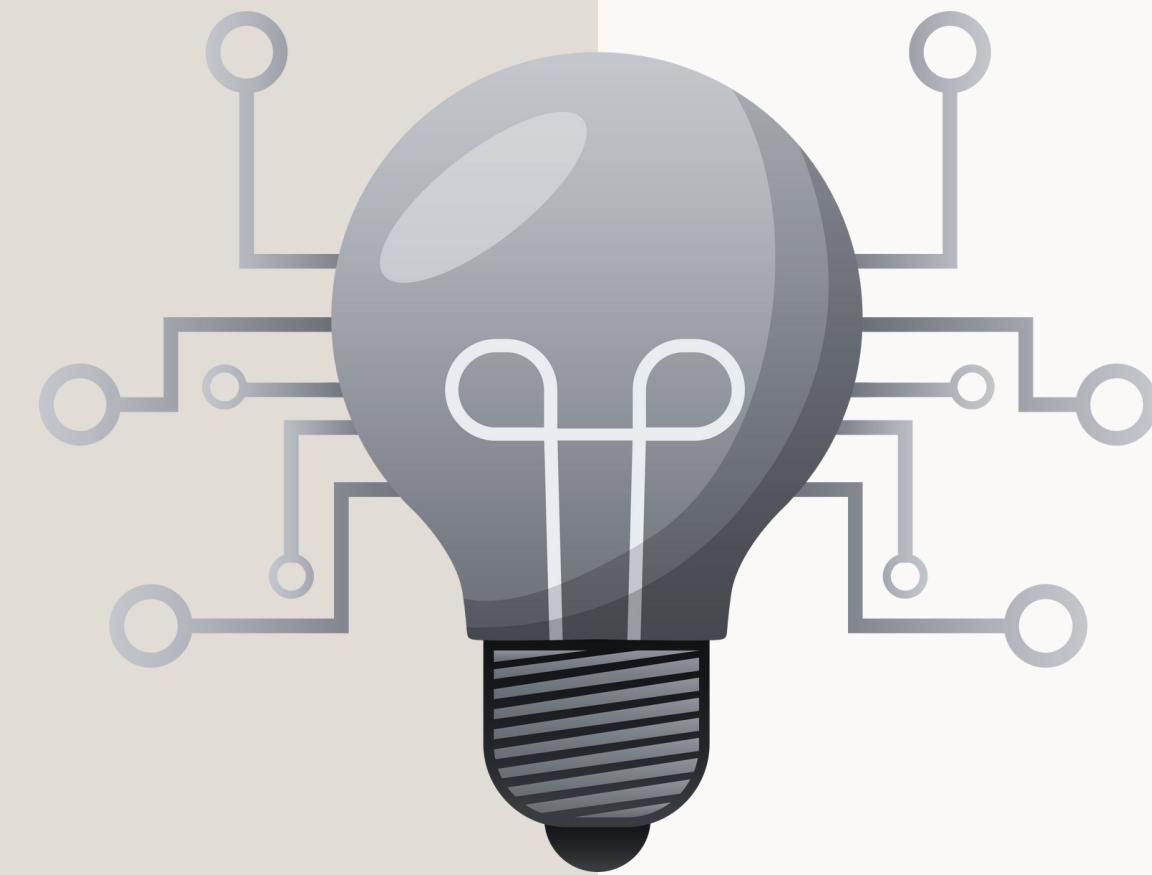


Assignment - 04

COGNITION AND INFORMATION PROCESSING IN DESIGN



Seven stages of interaction....



The Goal

Purchase a book on Amazon.



Plan

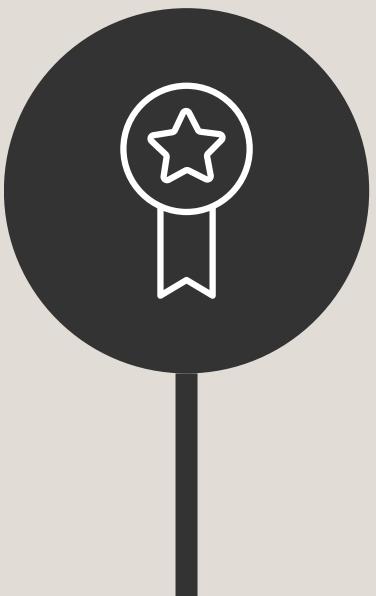
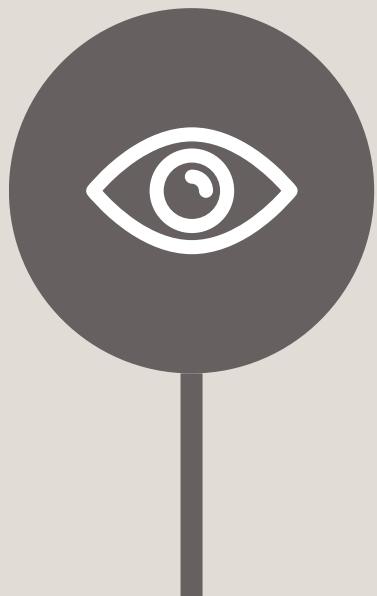
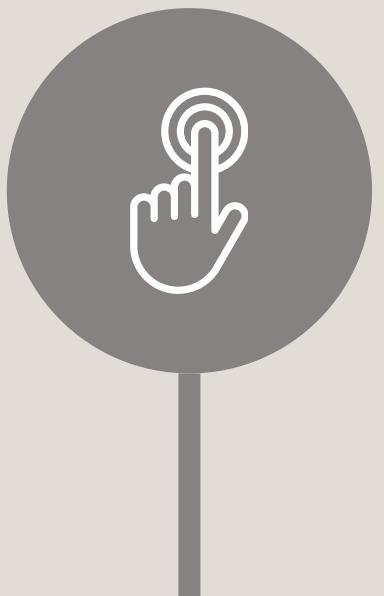
Understand how to navigate
Amazon's website to find it.



Specify

Used the search bar to enter the title and author of the book. Browsed through the search results to find the book I want to buy, Add it to the cart, Pay via google pay and confirm the book purchase.

to accomplish the goal.



Perform

Physically carried out the specified series of actions.

Perceive

Noticed the information displayed digitally and the book received.

Interpret

The platform has allowed me to buy the book and confirmed the delivery of the book.

Compare

The physical copy of the book has led me to achieve the goal.

EVALUATING THE USER INTERFACES AT 7 STAGES



STEP 1 - FORMING A GOAL

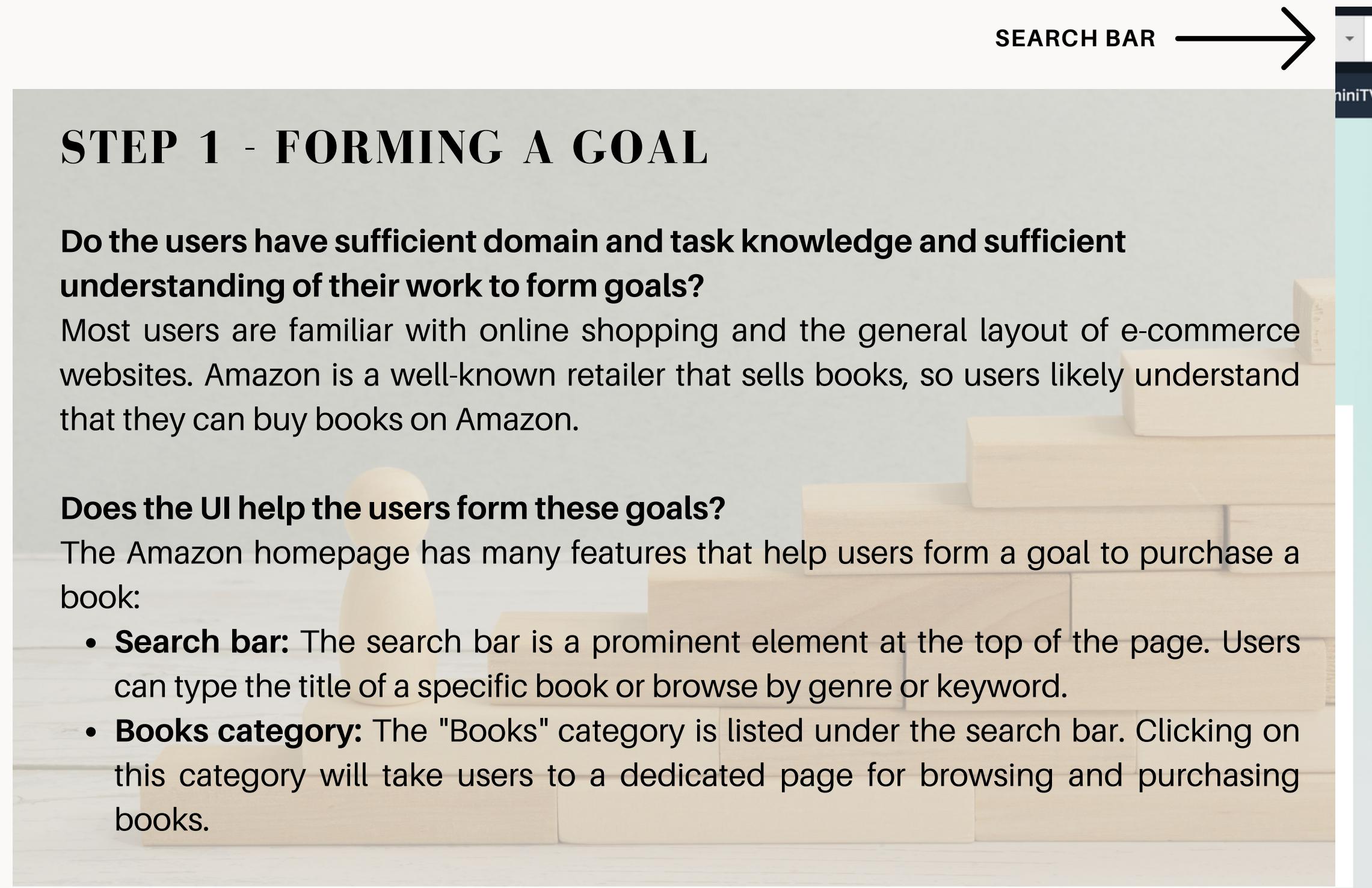
Do the users have sufficient domain and task knowledge and sufficient understanding of their work to form goals?

Most users are familiar with online shopping and the general layout of e-commerce websites. Amazon is a well-known retailer that sells books, so users likely understand that they can buy books on Amazon.

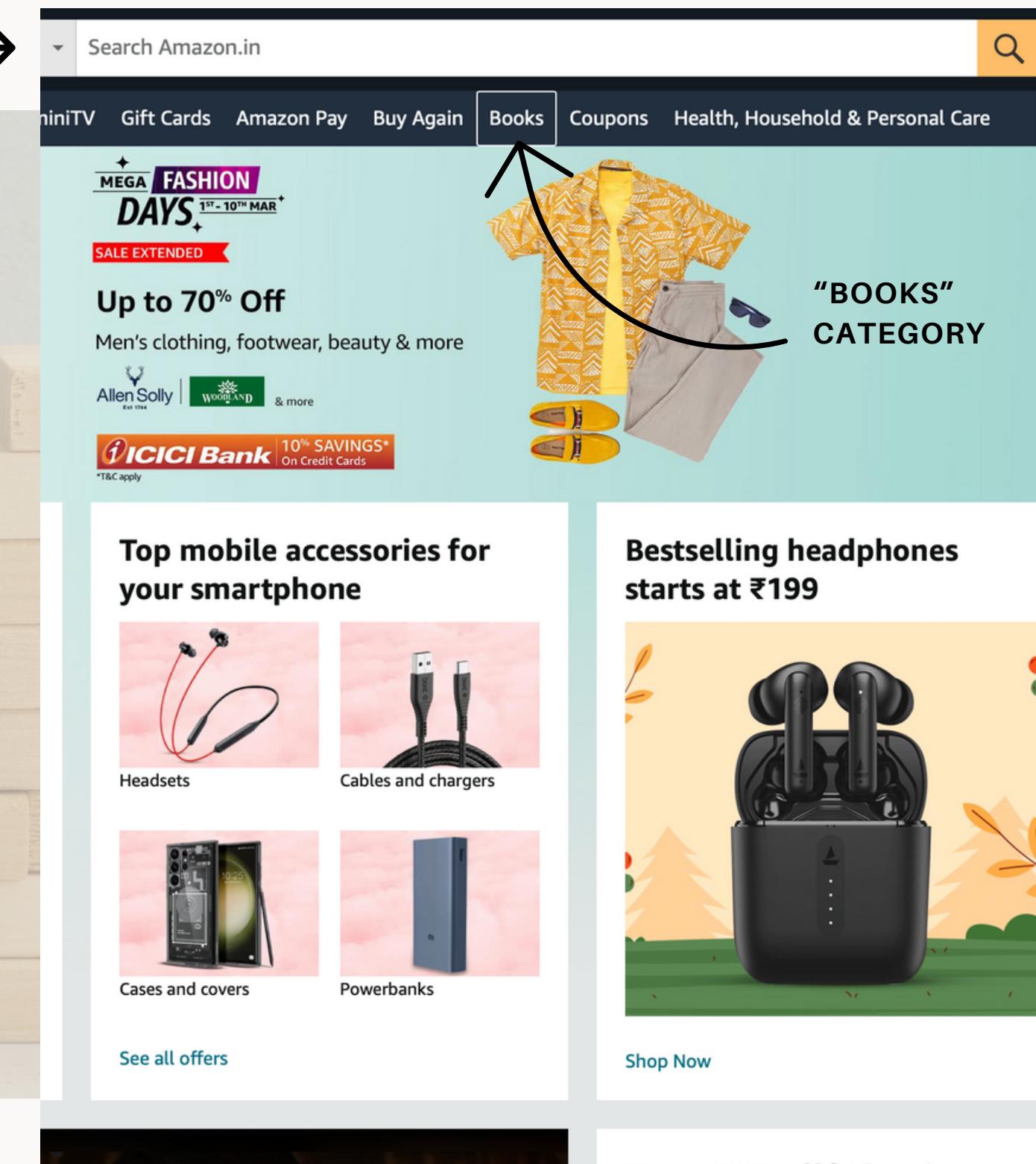
Does the UI help the users form these goals?

The Amazon homepage has many features that help users form a goal to purchase a book:

- Search bar:** The search bar is a prominent element at the top of the page. Users can type the title of a specific book or browse by genre or keyword.
- Books category:** The "Books" category is listed under the search bar. Clicking on this category will take users to a dedicated page for browsing and purchasing books.



SEARCH BAR →



STEP 2 - TRANSLATING THE GOAL INTO A TASK

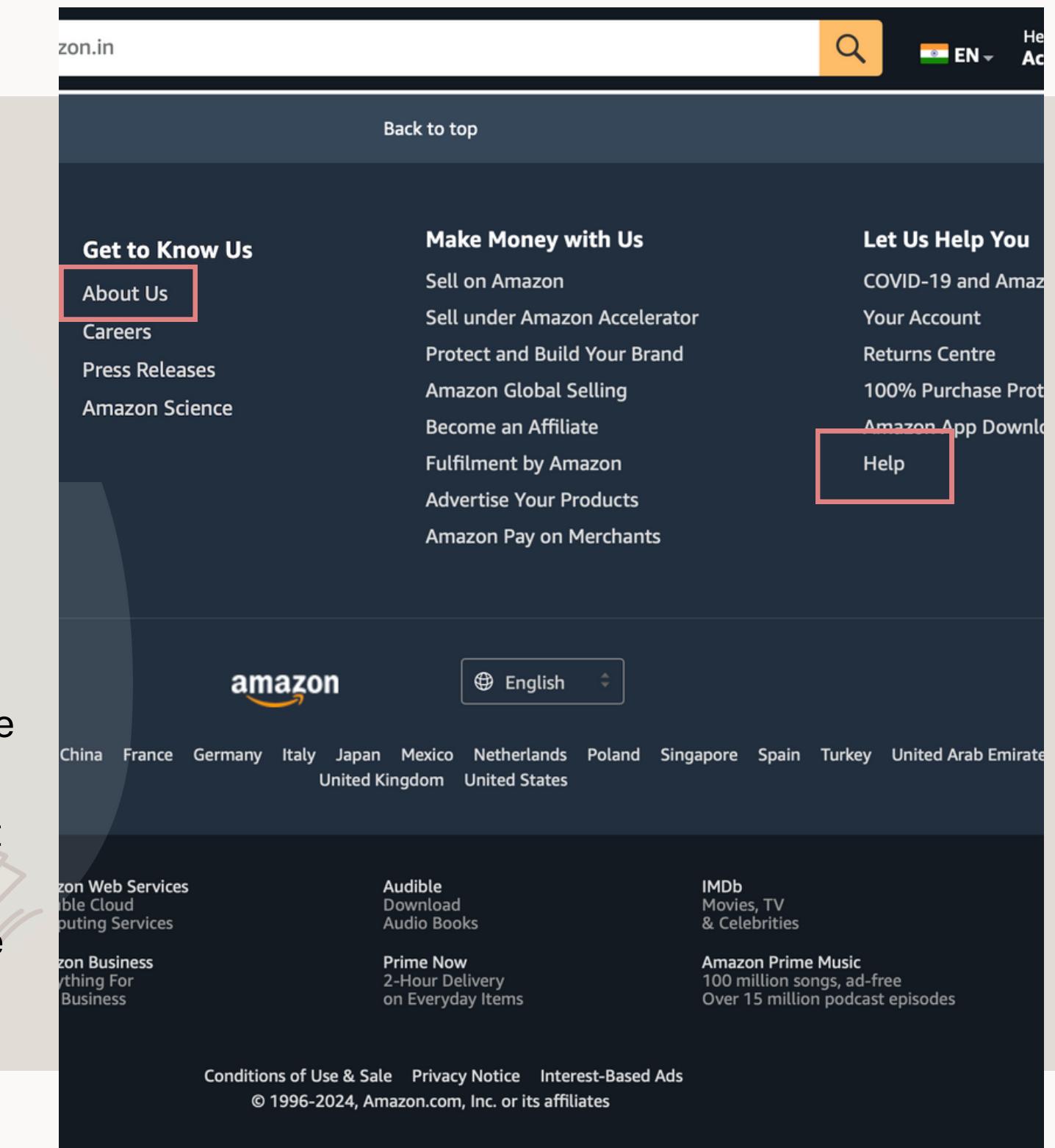
Do the users have sufficient domain and task knowledge and sufficient understanding of their work to formulate the tasks?

Most users are familiar with online shopping and would understand the task of navigating an e-commerce website to find a book. Amazon is a well-known e-commerce platform and users can leverage their general online shopping knowledge to navigate it.

Does the UI help the users formulate these tasks?

The Amazon footer has many features that can help users to understand about the website such as:

- **Help:** To get any doubts cleared, user can click on the help button to reach out to the help centre of Amazon.
- **About Us:** New user's can go to "About Us" section to get familiarised with the domain in which the company works.



STEP 3 - PLANNING AN ACTION SEQUENCE

Do the users have sufficient domain and task knowledge and sufficient understanding of their work to formulate the action sequence?

Yes, for most users. Buying a book online is a common task and the steps involved are generally understood.

Does the UI help the users formulate the action sequence?

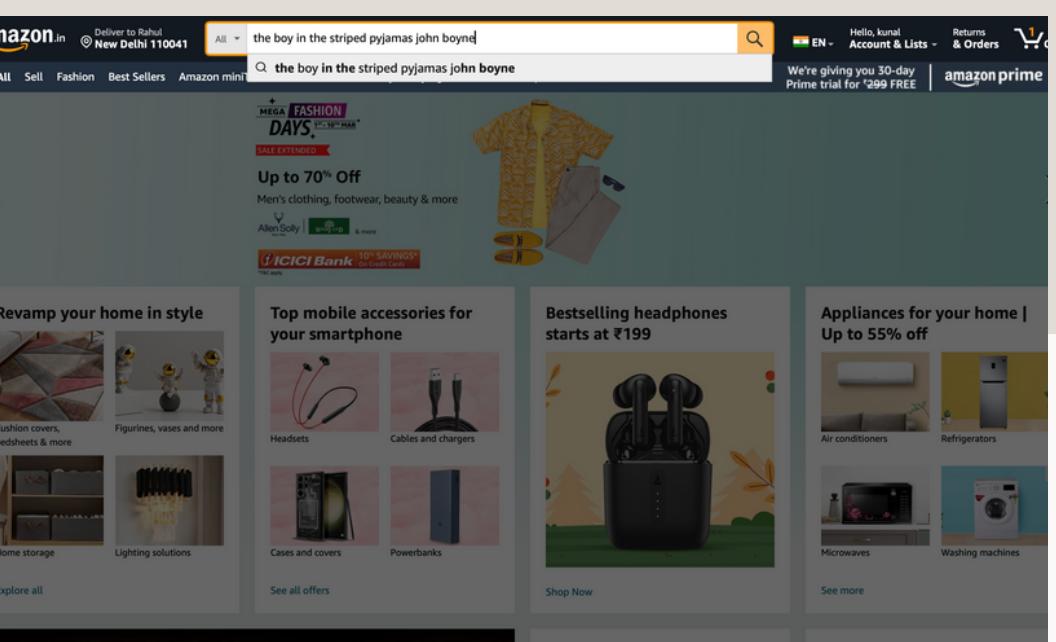
Most of the online stores follow a similar layout with a search bar prominently displayed, clear product listings, shopping cart functionality, and easy-to-find payment options. This consistency helps users form a mental model of the buying process.

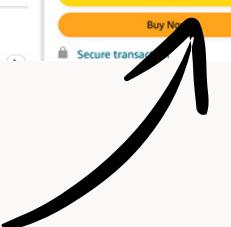
This is same in the case of amazon it has easy to use UI and it supports all the action sequences that user is planning to do. Next two slides shows how UI supports it.



STEP 3 - CONTINUED....

USER CAN SEARCH THE BOOK WITH THE BOOK TITLE AND AUTHOR'S NAME USING SEARCH BAR

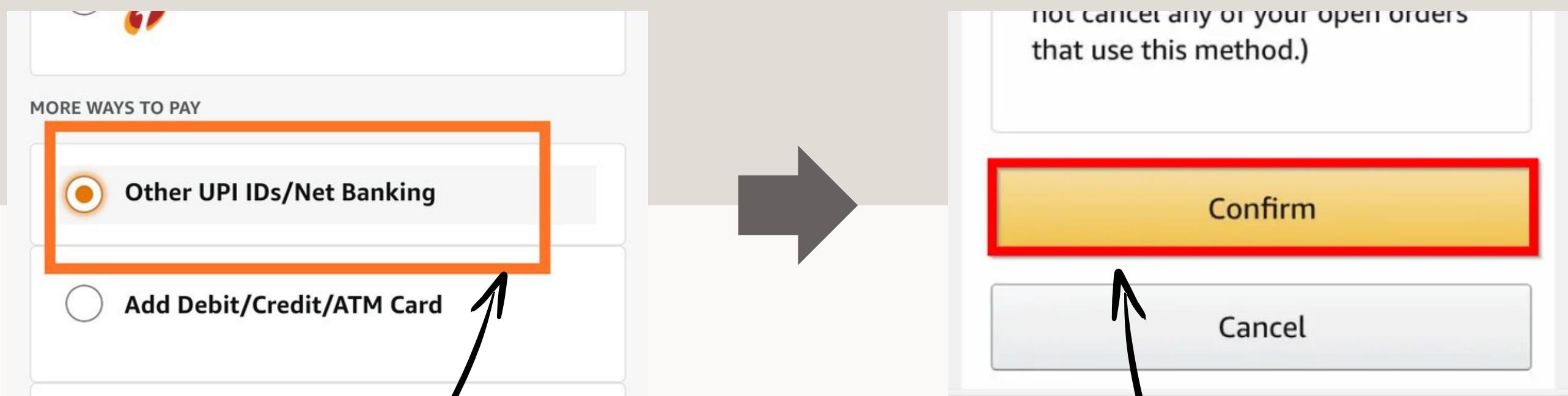




USER CAN BROWSE THROUGH THE SEARCH RESULT TO GET THE BOOK USER WANTED TO BUY

USER CAN ADD THE BOOK TO THE CART USING "ADD TO CART" BUTTON

STEP 3 - CONTINUED....



USER CAN USE DIFFERENT PAYMENT
METHODS TO PAY SUCH AS GOOGLE
PAY ETC.

USER CAN CLICK ON THE "CONFIRM"
BUTTON TO PLACE THE ORDER

STEP 4 - EXECUTING THE ACTION SEQUENCE

Can typical users easily learn and use the UI?

Yes, for most users. Amazon's interface is widely used and follows common e-commerce conventions. Finding a search bar, browsing results, and adding items to a cart are intuitive actions for most users with basic online experience.

Do the actions provided by the system match those required by the users?

Yes, Amazon offers actions that directly correspond to the user's goals: searching for a book, adding it to the cart, and Paying via Google Pay and confirming the order as shown in the step 3 (Page No. 8 and 9)

Are the affordance and visibility of the actions good?

Yes, The search bar, product listings, add to cart button, and Payment option and confirming the order are visually distinct and easy to locate as shown in step 3 (Page No. 8 and 9).



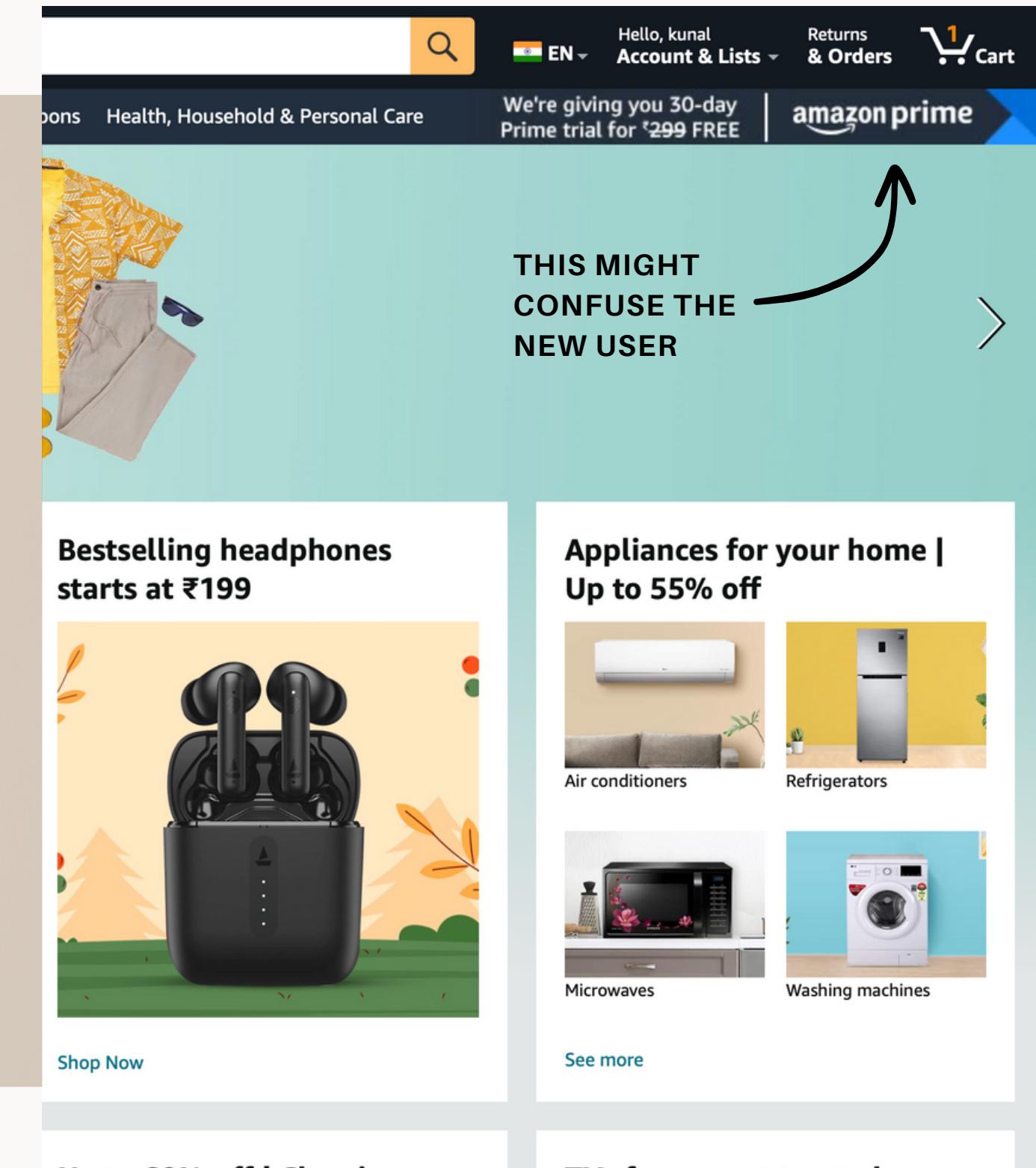
STEP 4 - CONTINUED....

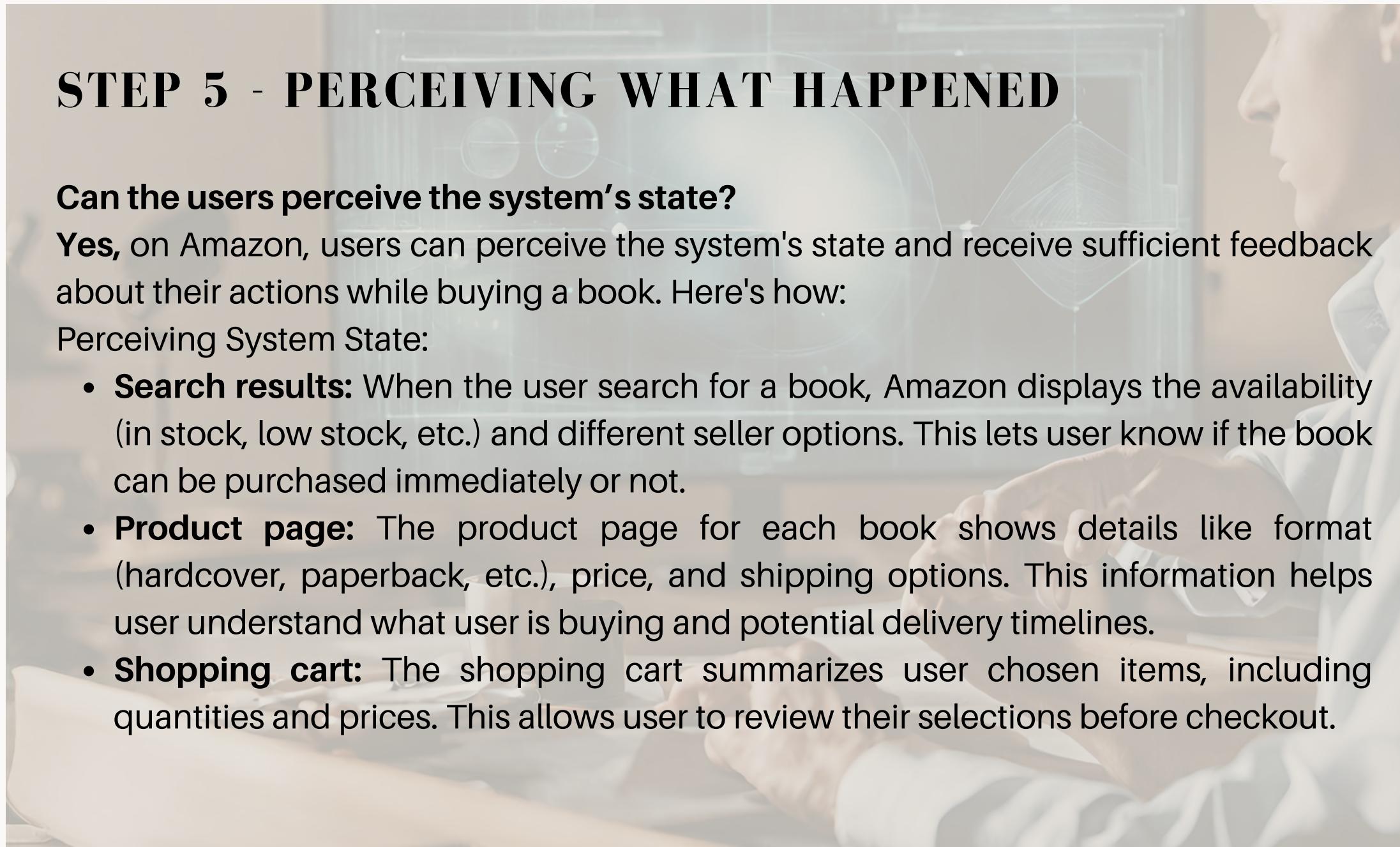
Do the users have an accurate mental model of the system?

Yes, for most tasks. Common e-commerce practices create a familiar mental model for buying online. Users can likely predict where to find information and how to complete tasks like buying a book.

Does the system support the development of an accurate mental model?

Partially. Amazon's interface is consistent for most basic actions. However, additional features and functionalities might confuse users with less experience. For example "Prime" membership may confuse new users as it is not consistent on all the online buying platforms.





STEP 5 - PERCEIVING WHAT HAPPENED

Can the users perceive the system's state?

Yes, on Amazon, users can perceive the system's state and receive sufficient feedback about their actions while buying a book. Here's how:

Perceiving System State:

- **Search results:** When the user search for a book, Amazon displays the availability (in stock, low stock, etc.) and different seller options. This lets user know if the book can be purchased immediately or not.
- **Product page:** The product page for each book shows details like format (hardcover, paperback, etc.), price, and shipping options. This information helps user understand what user is buying and potential delivery timelines.
- **Shopping cart:** The shopping cart summarizes user chosen items, including quantities and prices. This allows user to review their selections before checkout.

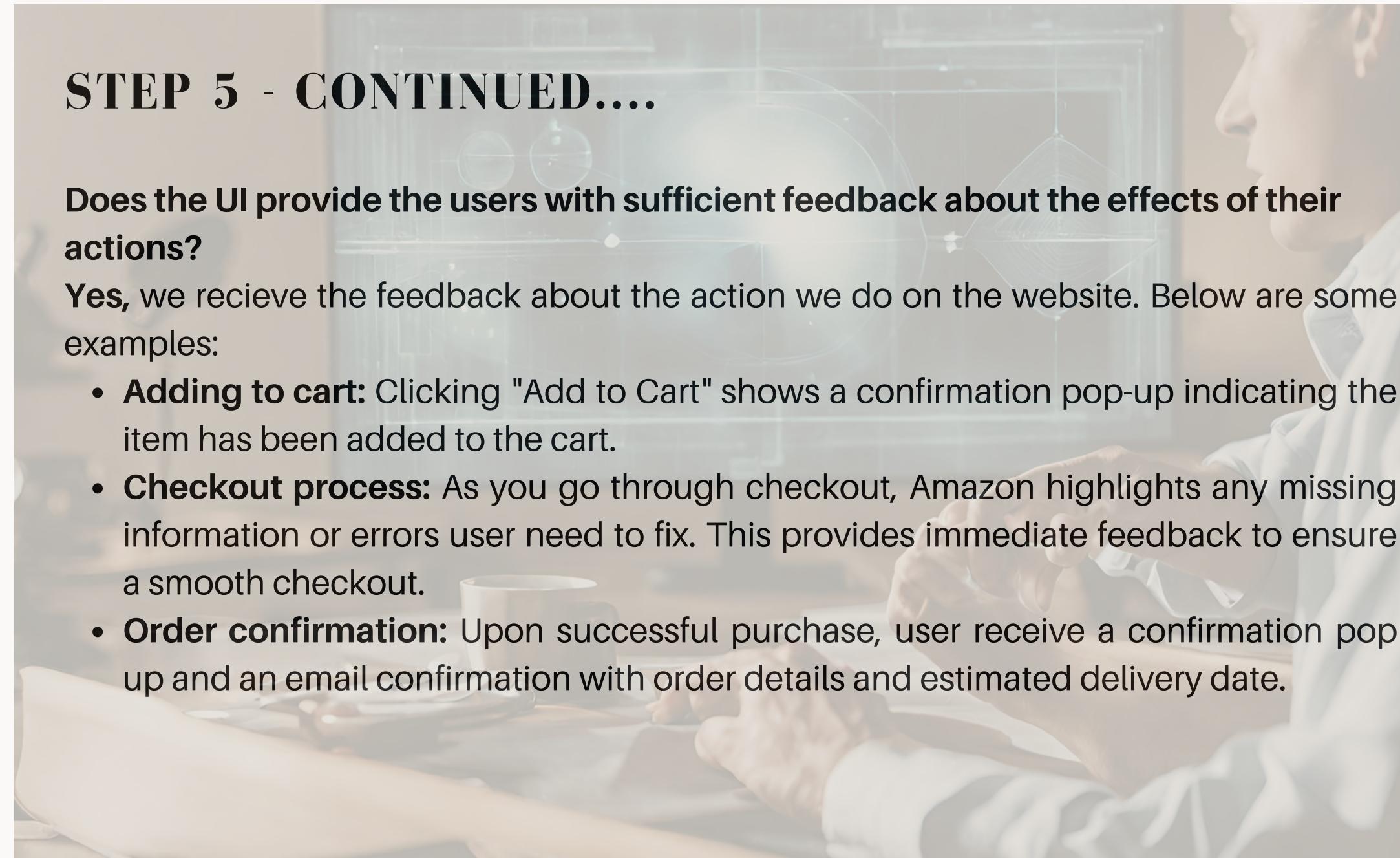


STEP 5 - CONTINUED....

AS SHOWN ABOVE WHEN WE SEARCH WE CAN BROWSE THROUGH DIFFERENT SELLER OPTIONS AND CAN CHECK THE AVAILABILITY OF THE BOOK

AS SHOWN ABOVE ON THE PRODUCT PAGE WE CAN SEE THE DETAILS OF THE BOOK. SOME OF THE DETAILS ARE MARKED ABOVE.

AS SHOWN ABOVE IN SHOPPING CART USER CAN SEE THE FINAL SUMMARY OF THE PRODUCT (IN OUR CASE ITS BOOK)



STEP 5 - CONTINUED....

Does the UI provide the users with sufficient feedback about the effects of their actions?

Yes, we receive the feedback about the action we do on the website. Below are some examples:

- **Adding to cart:** Clicking "Add to Cart" shows a confirmation pop-up indicating the item has been added to the cart.
- **Checkout process:** As you go through checkout, Amazon highlights any missing information or errors user need to fix. This provides immediate feedback to ensure a smooth checkout.
- **Order confirmation:** Upon successful purchase, user receive a confirmation pop up and an email confirmation with order details and estimated delivery date.



STEP 5 - CONTINUED....

The image consists of three side-by-side screenshots from an e-commerce website, likely Amazon, showing different stages of the checkout process:

- Screenshot 1 (Left):** Shows the product listing page for a book. A black arrow points from the "Added to Cart" confirmation message at the top right to the "Add to Cart" button below it.
- Screenshot 2 (Middle):** Shows the cart summary page. A black arrow points from the "Please enter a valid CVV code" validation message in the payment method section to the CVV input field.
- Screenshot 3 (Right):** Shows the confirmation page after the order has been placed. A black arrow points from the "Your order is confirmed!" message and the confirmation email snippet to the "View or Manage Order" button.

AS SHOWN ABOVE WHEN WE ADD THE ITEM TO THE CART IT SHOWS A POP UP WHICH SHOWS "ADDED TO CART" AS A CONFIRMATION

AS SHOWN ABOVE WHEN USER MISS SOME INFORMATION OR PROVIDE INVALID INFORMATION THE WEBSITE PROVIDES FEEDBACK ABOUT THE SAME.

AS SHOWN ABOVE AFTER PLACING THE ORDER. THE USER RECEIVED A CONFIRMATION POP UP AND A MAIL ON THEIR EMAIL WITH ALL DETAILS

STEP 6 - INTERPRETING THE OUTCOME ACCORDING TO THE USERS' EXPECTATIONS:

Are the users able to make sense of the feedback?

Yes, users will be able to make sense of the feedback. Some of the examples are as follow:

- **Clear confirmations:** Messages like "Added to Cart" and "Order Confirmed" are straightforward and easy to understand as shown in step 5 (Page No. 15).
- **Detailed information:** Information about stock availability, shipping options, and order details helps users confirm their expectations about the purchase as shown in step 5 (Page No. 13).

Does the UI provide enough feedback for this interpretation?

Yes, UI provides enough feedback for users to interpret the outcome according to their expectations

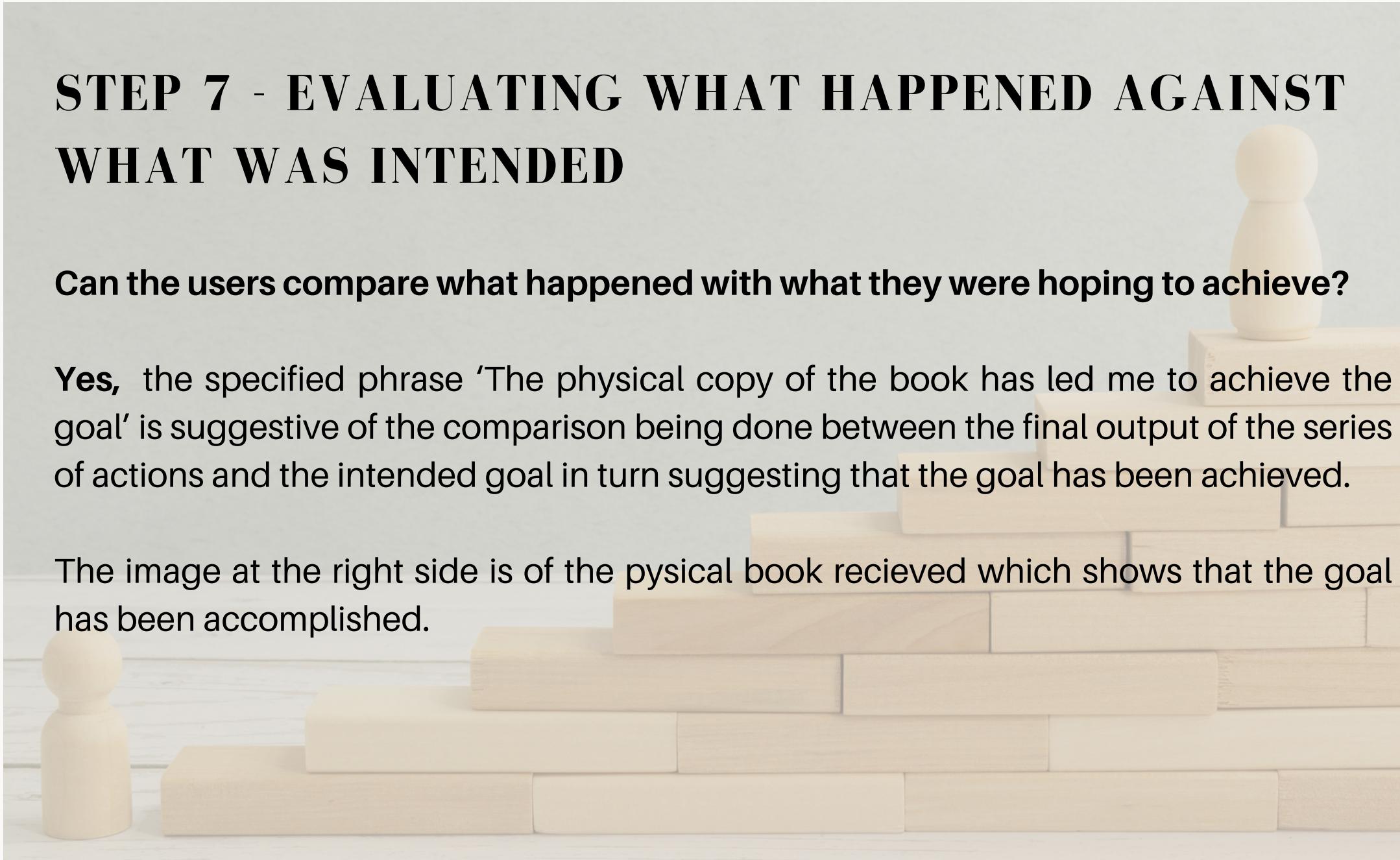


STEP 7 - EVALUATING WHAT HAPPENED AGAINST WHAT WAS INTENDED

Can the users compare what happened with what they were hoping to achieve?

Yes, the specified phrase 'The physical copy of the book has led me to achieve the goal' is suggestive of the comparison being done between the final output of the series of actions and the intended goal in turn suggesting that the goal has been achieved.

The image at the right side is of the physical book received which shows that the goal has been accomplished.



THANK YOU !

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