intopia

Using cognitive walkthroughs to better review designs for accessibility

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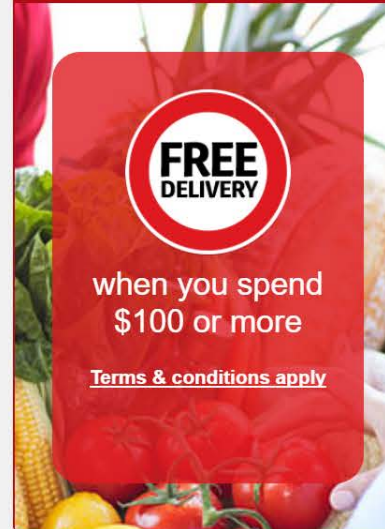# coles

Search for a product e.g. milk   **Search**

Browse categories

Category	Count
Christmas	962
Bread & Bakery	498
Fruit & Vegetables	441
Meat, Seafood & Deli	795
Dairy, Eggs & Meals	1,237
Pantry	5,699
Frozen	908
Drinks	1,264
Liquor	1,192
International Foods	785
Healthy Living	472
Household	1,937
Health & Beauty	3,147
Baby	467

This year's perfect gift is a gift for people in need.

1.4 kg VALUE PACK

Weet

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Hand picked, hand packed and delivered

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DOWN DOWN

short cut bacon

Coles Short Cut Bacon Rindless 200g. From the Dairy Department

Shop now

Recipe of the Week

The #1 online grocery service

CANSTAR

SPECIAL

Coles
Kensington Pride Mangoes

$2.50 per 1Ea

SPECIAL

Coles
Grill RSPCA Approved Chicken Kebabs Honey Soy

450g $13.33 per 1Kg

$0.00
Trolley and checkout

Choose a delivery time

Log in / Signup

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coles

Search for a product e.g. milk | Search

| Everything | 18,961 | BB Bought Before | 0 | $ Specials | 3,192 | ⌄ |

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Can we develop a process to conduct a **task-oriented** and **user-oriented** expert review?

What is a cognitive walkthrough?

An evaluator examines the usability of a product by walking through a series of tasks and asking a set of questions from a user's point of view.

Step 1

Choose a user or persona

Option 1: Enhance existing personas

Give your existing personas access requirements

Option 2: Accessibility-specific personas

Build off existing personas or create new personas

A good persona should include information about:

- their ability and any assistive technology they use (ability).

- the affect their ability has on their digital experience (aptitude)

- their motivation, emotion, risk tolerance, and persistence (attitude)

Adapted from A Web for Everyone - personas

Example persona: Joe

Joe has hand tremors from Parkinson's.

Touching small areas of the screen is difficult for Joe.

He has trouble accurately performing complex gestures.

He often accidentally activates a control when controls are close together.

Joe finds using a mouse very difficult and therefore usually use a keyboard with his laptop.

Adapted from Mobile Concepts (draft)

Example persona: Sue

Sue has low vision and uses a magnifier.

Pages with inconsistent layout and navigation are difficult for Sue.

She finds it difficult when there are large white spaces between information that is related.

She often has to increase her magnification level when text is smaller than body copy or fonts are light weight.

Step 2

Create a list of tasks a user wants to do

Common tasks for an eCommerce website

- Search for a product
- Browse for a product
- Add products to your trolley
- Checkout and pay for your products
- Contact the organisation
- Find out about the accessibility options

Step 3

Create a list of steps needed to complete each task

Search for a product

1. Open a web browser

2. Navigate to the eCommerce website

3. Enter "Christmas" into the search field and search

4. Find "Rich chocolate puddings" product

5. View product details

6. Add product to cart

Step 4
Perform the walkthrough for each task

Perform the walkthrough by:

1. Adopt a persona

2. Choose a task

3. Walk through the steps for that task as if you were in the shoes of your adopted persona

Do this for all tasks with different personas.

As you complete the task, ask a series of questions

- Will the user try and achieve the right outcome?
- Will the user notice and be able to access the correct action?
- Will the user associate the correct action with the effect that the user is trying to achieve?
- If the correct action is performed, will the user see that progress is being made toward the solution of the task?
- Is it easy to achieve the correct action?

Will the user try and achieve the right outcome?

- Does the interface confuse, mislead, or behave differently from a user's expectations?

Will the user notice that the correct action is available to them?

- Is the action easily noticeable?

- Does it stand out?

- Is it easy to find?

Will the user associate the correct action with the effect that the user is trying to achieve?

- Is the language of labels or instructions clear?
- Does the interaction method (keyboard, touch, mouse, etc.) work as the user expects?

If the correct action is performed, will the user see that progress is being made toward the solution of the task?

- Is there appropriate feedback?

- Is that feedback perceivable?

- Is the feedback understandable?

Is it easy to achieve the correct action?

- Can I quickly and easily navigate to it?
- Do I know when I've got to the right action?

Benefits of cognitive walkthroughs

- task-oriented
- can be done during the early stages of design
- can identify requirements gaps
- more cost effective and fast compared with usability testing

Things to be cautious of when using cognitive walkthroughs

- not a replacement for usability testing

- can be time consuming

- insights can be affected by the knowledge and skill of the person conducting the walkthrough

Let's continue the conversation

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