EXSM 3929 Assignment 2: - Manual and Automated Testing

Student: mdshaha1, Hossain Md Shahadat
Due: May 21, 2023

Description

The purpose of this assignment is to gain practice with manual and automated website or web application accessibility testing. We will manually test a website or application first and then use two different automated tests. It is important that we note any important differences between the two methods. Furthermore, we will need to comment on the test results.

A simple manual testing process is provided, but feel free to add your own criteria or remove some items if they do not apply to your website. There are many automated accessibility testing tools that are free to use. Research a few tools and then select two specifically for this assignment.

- https://www.w3.org/WAI/ER/tools/

Note: Many of the automated testing tools will cite the Web Accessibility Standards. We will specifically cover this topic later in the course.

Instructions

Make a **copy** of this document, **edit**, **export** as a **PDF** and **submit** on **eClass**. Please keep this cover page.

DESCRIPTION	VALUE	MARK
Document is **submitted** with proper **ccid**, **name**, and **date**	2	
Document is **complete** with talking points **relevant to the course**	8	

Assignment

Part 1 — Introduction: -

1. **Which website or web application will you test, and why? (Provide the link)**

Answer:

I will test an e-commerce website. As my thoughts e-commerce websites are used by all users of every level. So, this categorized website should be well designed & developed as well as easy to navigate. Website link - https://www.flipkart.com/

2. **What is the purpose of this website or application?**

Answer:

The Flipkart website's goal is to serve as a platform for online transactions. It makes it possible for clients to shop online from a huge selection of goods. Flipkart acts as a marketplace where vendors may post their goods and connect with a wide audience of customers. To draw customers, the website provides competitive pricing and promotions. Additionally, it guarantees effective logistics and delivery services for on-time order fulfillment. With a user-friendly layout, safe payment methods, and committed customer service, Flipkart puts the needs of its customers first. The Flipkart website intends to facilitate online buying and offer a platform for connecting customers and merchants.

3. **Describe the steps a typical user must take in order for them to achieve their objective? (at least four steps, for example *"a. Navigate to the homepage, b. Read the latest news headline, c. Observe the option to "read more", d. Click the read more button, e. Continue reading on the next page" ...*)**

Answer:

The steps a typical user must take for them to achieve their objective from the website (flipkart) I have mentioned are following: -

a. Navigate to the homepage.

b. Look for the product to buy.

c. Click Add to cart or buy now.

d. Complete checkout process.

Part 2 — Specific Instructions: -

☑Using only the keyboard (no mouse or trackpad) try to achieve the user objective using the steps you have described above.

- **Make a note about any barriers or frustration.**

Answer:

There is no focus rather than the search bar in the website (flipkart). Whenever I tried to move using keyboard accessibility it doesn't show any focus area where I am at or which product, I'm on now. That's the obstacle I faced here.

- Simplified manual checklist.
  - ☑The page has a logical tab order.
  - Interactive controls are keyboard focusable.
  - Interactive elements indicate their purpose and state.
  - User focus is not accidentally trapped in a region.
  - ☑ Forms and custom controls have associated labels.
- *Advanced: try to achieve this same objective with eyes closed and screen reader on (no mouse or trackpad)*

- ☑ Research and select two different automated accessibility tools from the link above.
- ☑ Run the automated tests on your website or web application of choice.
- ☑ Take a screenshot of the tool test results (each, use the screenshots in Part 3)
- ☑ Review the reports and summarize any important findings (answer below)

Part 3 — Reflection: -

1. Were you able to achieve your user outcome without the mouse or trackpad?
   - ☑ 1 (no)
   - 2
   - 3
   - 4
   - 5 (yes)
2. How easy were the automated test results to understand?
   - 1 (not easy)
   - 2
   - 3
   - ☑ 4
   - 5 (very easy)

Section B: -

1. **Were you able to achieve your user outcome without the mouse or trackpad? Discuss why you selected the score above. (Use at least three sentences)**

Answer:

No, I couldn't achieve my user outcome without the mouse. As it doesn't have any focusable area. That's why I didn't even know which product I'm on or what is selected. Whenever I tried to achieve the user outcome with keyboard accessibility by pressing 'tab', I can see the links at the bottom corner of my browser (Google Chrome) changing but it is not showing with focus area where am I right now. That's I selected the score above as I am not satisfied with this website's accessibility.

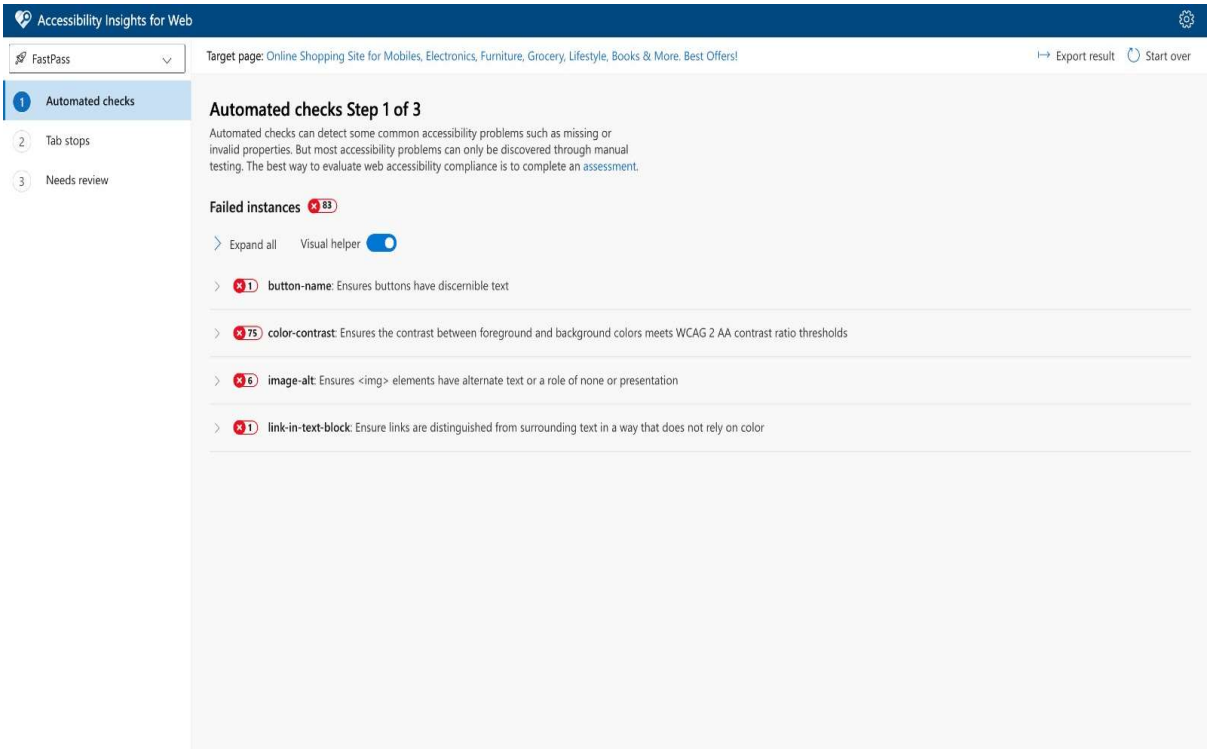
2. **Describe the most important results from each automated testing tool, add in screenshots of the tool results (use at least three sentences each).**

Answer:

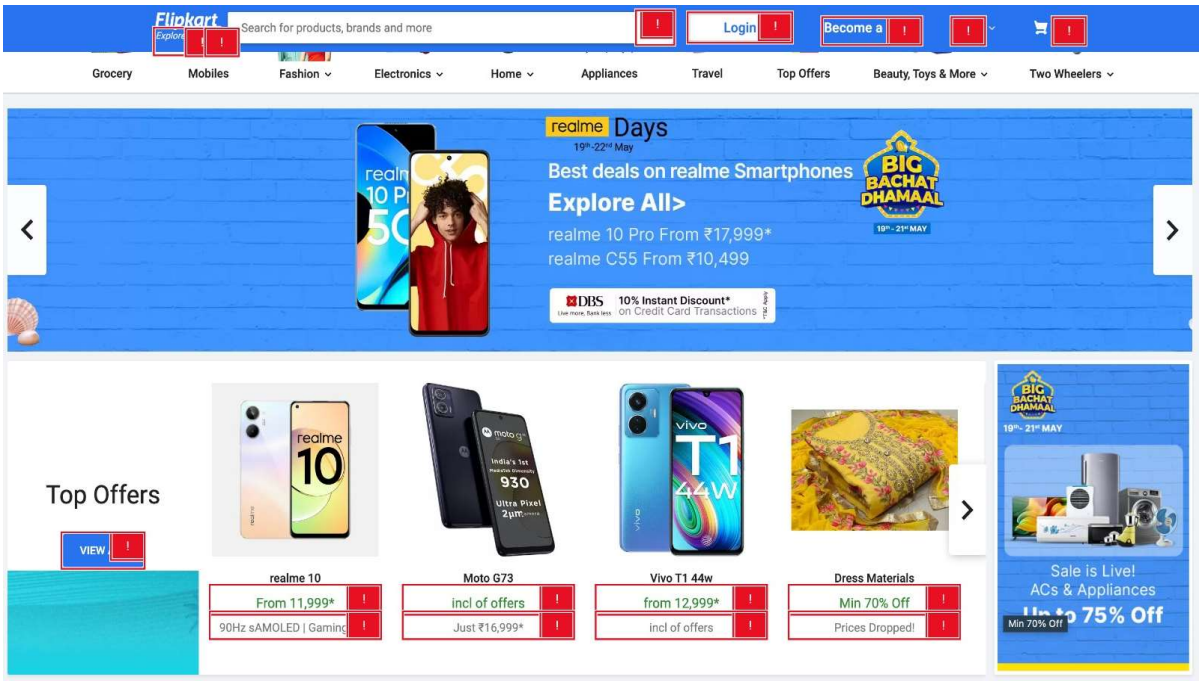
I have used two tools which are: 1. Site improve Accessibility Checker, 2. Accessibility Insights for Web

From the site improve accessibility checker I got result where the site has lots of color contrast issues. Beside this, it has more than 300 keyboard navigation issues which I have showed with tab stops phase with this checker. Again, from accessibility insights for web, I got results where it shows this website's performance is not even half of the total score. As well as it takes more than 10 seconds to load the website in mobile.

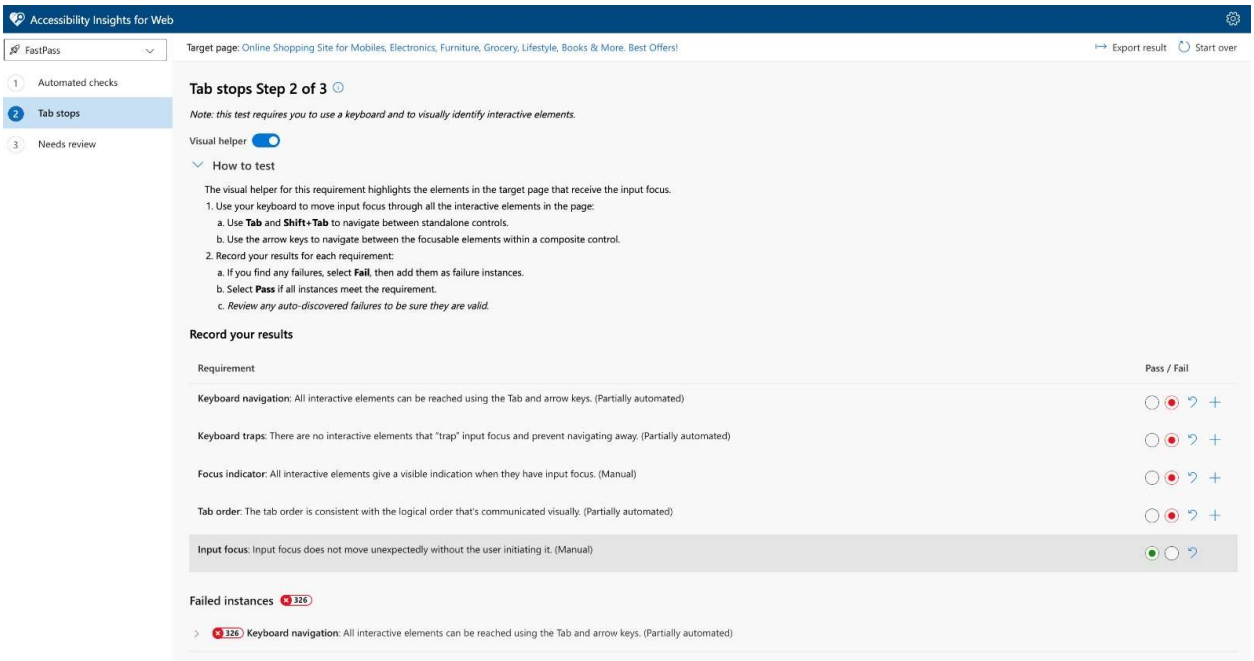
No-1



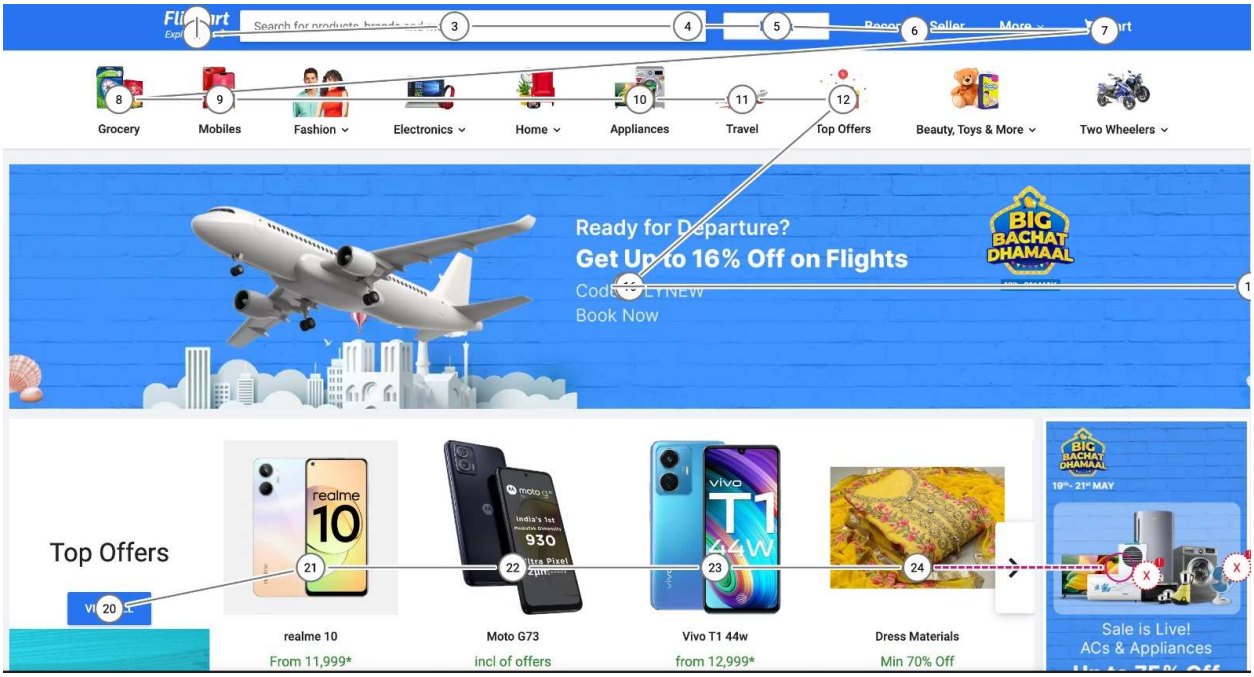
No-2


Flipkart
Search for products, brands and more
Login
Become a
Grocery
Mobiles
Fashion
Electronics
Home
Appliances
Travel
Top Offers
Beauty, Toys & More
Two Wheelers
realme Days
19th-22nd May
Best deals on realme Smartphones
Explore All>
realme 10 Pro From ₹17,999*
realme C55 From ₹10,499
BIG BACHAT DHAMAAL
19th - 21st MAY
DBS 10% Instant Discount* on Credit Card Transactions
Top Offers
VIEW
realme 10
From 11,999*
90Hz sAMOLED | Gaming
Moto G73
incl of offers
Just ₹16,999*
Vivo T1 44w
from 12,999*
incl of offers
Dress Materials
Min 70% Off
Prices Dropped!
Sale is Live!
ACs & Appliances
Up to 75% Off
Min 70% Off

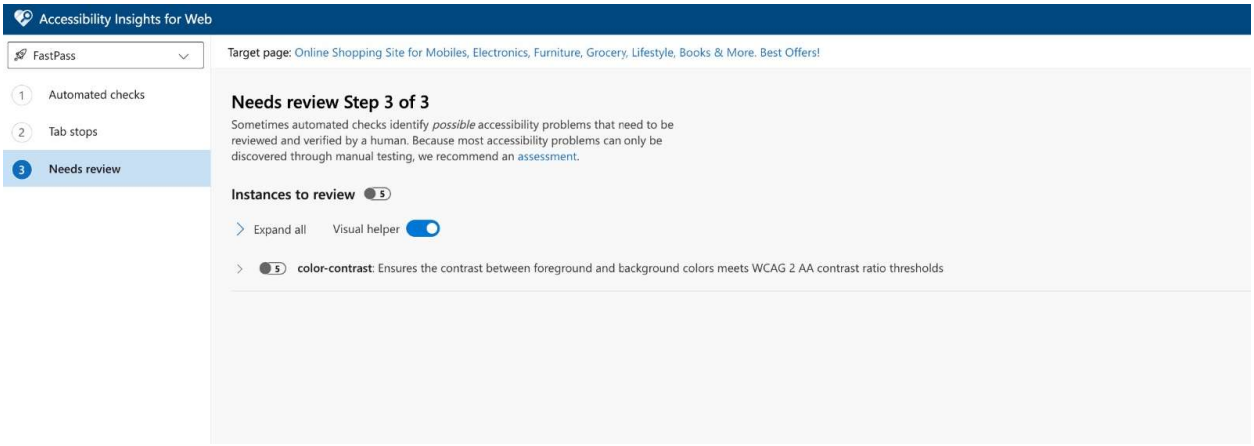
No-3


Accessibility Insights for Web
FastPass
Target page: Online Shopping Site for Mobiles, Electronics, Furniture, Grocery, Lifestyle, Books & More. Best Offers!
Export result
Start over
1 Automated checks
2 Tab stops
3 Needs review
Tab stops Step 2 of 3
Note: this test requires you to use a keyboard and to visually identify interactive elements.
Visual helper
How to test
The visual helper for this requirement highlights the elements in the target page that receive the input focus.
1. Use your keyboard to move input focus through all the interactive elements in the page:
a. Use Tab and Shift+Tab to navigate between standalone controls.
b. Use the arrow keys to navigate between the focusable elements within a composite control.
2. Record your results for each requirement:
a. If you find any failures, select Fail, then add them as failure instances.
b. Select Pass if all instances meet the requirement.
c. Review any auto-discovered failures to be sure they are valid.
Record your results
Requirement
Pass / Fail
Keyboard navigation: All interactive elements can be reached using the Tab and arrow keys. (Partially automated)
Keyboard traps: There are no interactive elements that "trap" input focus and prevent navigating away. (Partially automated)
Focus indicator: All interactive elements give a visible indication when they have input focus. (Manual)
Tab order: The tab order is consistent with the logical order that's communicated visually. (Partially automated)
Input focus: Input focus does not move unexpectedly without the user initiating it. (Manual)
Failed instances 326
326 Keyboard navigation: All interactive elements can be reached using the Tab and arrow keys. (Partially automated)

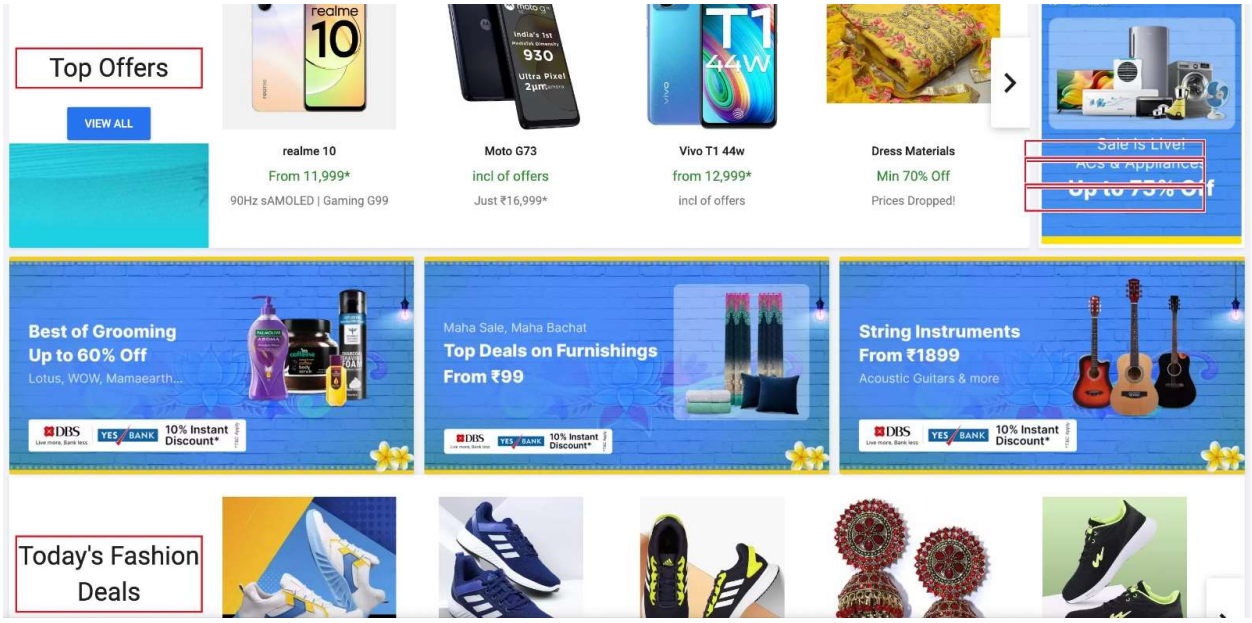
No-4


Search for products, brands and more
Seller
More
Grocery
Mobiles
Fashion
Electronics
Home
Appliances
Travel
Top Offers
Beauty, Toys & More
Two Wheelers
Ready for Departure?
Get Up to 16% Off on Flights
Book Now
BIG BACHAT DHAMAAL
Top Offers
realme 10
realme 10
From 11,999*
Moto G73
incl of offers
Vivo T1 44w
from 12,999*
Dress Materials
Min 70% Off
19th - 21st MAY
Sale is Live!
ACs & Appliances

No-5


Accessibility Insights for Web
FastPass
Automated checks
Tab stops
Needs review
Target page: Online Shopping Site for Mobiles, Electronics, Furniture, Grocery, Lifestyle, Books & More. Best Offers!
Needs review Step 3 of 3
Sometimes automated checks identify possible accessibility problems that need to be reviewed and verified by a human. Because most accessibility problems can only be discovered through manual testing, we recommend an assessment.
Instances to review
Expand all
Visual helper
color-contrast: Ensures the contrast between foreground and background colors meets WCAG 2 AA contrast ratio thresholds

No-6


Top Offers
VIEW ALL
realme 10
From 11,999*
90Hz sAMOLED | Gaming G99
Moto G73
incl of offers
Just ₹16,999*
Vivo T1 44w
from 12,999*
incl of offers
Dress Materials
Min 70% Off
Prices Dropped!
Sale is Live!
Best of Grooming
Up to 60% Off
Lotus, WOW, Mamaearth...
DBS YES BANK 10% Instant Discount*
Maha Sale, Maha Bachat
Top Deals on Furnishings
From ₹99
DBS YES BANK 10% Instant Discount*
String Instruments
From ₹1899
Acoustic Guitars & more
DBS YES BANK 10% Instant Discount*
Today's Fashion Deals

No-7

This site has room to improve

Accessibility
Overview of automated checks completed

SEO

Performance
Loading experience

Ads

3. **Discuss whether the automated testing tools captured your manual testing experience, and whether they automated provided any value that was not captured manually (use at least three sentences).**

Answer:

One of the checkers asked for my manual experience about the website which is keyboard navigation. Where this website loss their accessibility. It has room to improve in this case. Although they have provided some automated results, but those are agreeable from my perspective.

----------Thank You.