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|  | **Oxford University Press**  **ARC** | | | | | | | | |
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|  | **Accessibility Test Summary Report** | | | | | | | | |
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|  | **Version 1.0** | | | | | | | | |
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# Introduction

The purpose of this test report is to detail the Execution and Outcome of the Accessibility Testing for the ARC. The Cognizant Accessibility team performed one round of test execution based on the WCAG 2.0 Level AA accessibility guidelines across Desktop & Mobile browsers.

Accessibility testing is performed to ensure that web sites are accessible to all users, regardless of disability. Cognizant NFT team has carried out accessibility testing through on-demand service offering – ATAAS model. Testing has been conducted from Offshore (India).

Following sections of the report provide detailed insights into the activities undertaken as part of this engagement along with the observations as noted by the Accessibility team.

# Scope

The Cognizant Accessibility team conducted one round of test execution against WCAG 2.0 Level AA accessibility guidelines for ARC that has been confirmed by the Project team. All the identified non-compliances have been logged in Jira defect management repository and the details have been shared with the project team.

## 2.1 Browsers and tool details

Below are the OS & Browser combinations for Desktop and Mobile, and accessibility tools used for accessibility testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Device | OS Version | Browser | Tools | Comments |
|  | Windows 10 | Chrome | 1.JAWS | Screen Reader for Desktop Browser (Commercial) |
| Desktop | 2.NVDA | Screen Reader for Desktop Browser (Freeware) |
|  | 3.CCA | Tool Validates Color contrast ratio |
| MacOS | Safari | Voice over | Screen Reader for Mac device |
| Mobile | iOS | Safari | Voice over | Screen Reader for iOS device |

## 2.2 Applications Tested

|  |  |
| --- | --- |
| Application | Page count |
| ARC | 10 |

# Testing Approach

Below methodology was followed to test ARC across Desktop, Mac and Mobile devices.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Platform** | **Verify Key Guidelines – Manual Check & CCA** | **Check Keyboard Accessibility** | **Test with Screen Reader** | **Test Content Scaling** |
| **Web**  **Accessibility** | Use of Color Contrast Analyzer to check the contrast between text and background in the web pages.  Manual verification to validate WCAG 2.0 Level A/AA  Captions, Transcripts are provided for video/audio content and are in sync/Equivalent with video/audio content. Audio descriptions are provided for video content wherever necessary | Validate the complete web page using keyboard only to simulate the experience of a user who cannot use the mouse due to physical impairment | Use screen readers(NVDA/JAWS) and navigate through the web page using keyboard | Adjust the size of the text on the browser & Use assistive software’s (magnifiers) to magnify the web page |
| **Mobile**  **Accessibility** | Use of Color Contrast Analyzer to check the contrast between text and background in the web pages.  Manual verification to validate WCAG 2.0 Level A/AA  Captions, Transcripts are provided for video/audio content and are in sync/Equivalent with video/audio content. Audio descriptions are provided for video content wherever necessary | Validate the complete web page with the help of screen reader gestures to simulate the experience of a user who cannot use the mouse due to physical impairment. | Use screen readers (Voiceover) and navigate through the web page | Adjust the size of the text/screen by enabling zoom/magnify options in settings  Pinch and zoom the screen to magnify the web page |
| **Testing Benefits** | Visual and Audio Challenge | Dexterity and Motor impairments | Visual and Cognitive Challenges | Visual challenges |

# Execution Summary

Test environment details are mentioned below

|  |  |
| --- | --- |
| Application | Environment |
| ARC | Prod |

## 4.1 Execution Status

Following table provides overall execution status and compliance percentage of the application.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Application | Device | OS/Browser | Total no. of pages | Total no. of pages | | % Completed |
| Not applicable | Completed |
| ARC | Desktop | Windows10/Chrome | 10 | 0 | 10 | 100% |
| ARC | Mobile | IOS-Safari | 10 | 0 | 10 | 100% |
| ARC | Mac | MacOS-Safari | 10 | 0 | 10 | 100% |
| Total | | | 30 | 0 | 30 | 100% |

### 4.2 Defect Severity level

### 4.3 Impacted Users

## 4.4 Top 5 Checkpoints failed

* 1.3.1 Info and Relationships
* 2.1.1 Keyboard
* 2.4.3 Focus Order
* 4.1.2 Name, Role, Value
* 2.4.4 Link Purpose

### 4.5 Compliance Status

|  |  |
| --- | --- |
| Application | Compliance status |
| ARC | ~ 40.0% |

Note: Compliance % is calculated considering only the Passed guidelines against applicable guidelines (out of 38) for the pages tested

### 4.6 Non-Compliance Summary

Accessibility Non-compliances identified during the test execution are logged in the defect tracker for ARC Application.

Below are the WCAG 2.0 accessibility guidelines, for which high density of the accessibility issues are observed.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Major Level A Issues |  |  |  | Major Level AA Issues |
| * 1.3.1: Info and Relationships |  |  |  |  |
| * 4.1.2 Name, Role, Value |  |  |  | * 2.4.7: Focus Visible |
| * 2.1.1: Keyboard |  |  |  |  |
| * 2.4.3: Focus Order |  |  |  |  |
| * 2.4.4: Link Purpose |  |  |  |  |

# Defect Summary

Following table provides overall summary of defects across the application:

|  |  |  |
| --- | --- | --- |
| Application | Level A | Level AA |
| ARC | 35 | 2 |

# Defect Tracker and Recommendation



# Conclusion

Based on the Accessibility assessment conducted on the ARC against WCAG 2.0 Level AA it is observed that the website fails to satisfy the WCAG guidelines which in turn will make the application inaccessible to differently-abled group. We highly recommend that all the identified accessibility issues to be fixed for the enhanced accessibility to the business users. All the non-compliances have been logged in Jira defect management tool and the details have been shared with the project team.

# Appendix

## 8.1 Screens Tested for both - Desktop & Mobile

|  |  |  |
| --- | --- | --- |
| **S.No** | **Page Name** | **Application** |
| 1 | Student - Main Page | Student |
| 2 | Chapter 08 - Pre-test |
| 3 | Chapter 08 - Outline Quiz |
| 4 | Chapter 01 - Flashcards Page |
| 5 | Chapter 03 - FREAKY FRIDAY (Video) |
| 6 | Chapter 06 - Four Thought Patterns (Video) |
| 7 | Chapter 08 - Chapter 8 Exam Prep Questions |
| 8 | Chapter 09 - Self-Quiz |
| 9 | Instructor - Main Page | Instructor |
| 10 | Instructor - Left Navigation: Browse All-Speech Recording Activities Video page |

## 8.2 Page Complexity Categorization

|  |  |
| --- | --- |
| **Complexity** | **Details** |
| **Simple** | •No of Elements <= 10, page tabs <=3 |
| •Simple Data table (3\*3) |
| •No video/Audio Content |
| **Medium** | •No of Elements 10-15, page tabs 4-5 |
| •Data table up to (6\*6) |
| •Video content <=2 |
| •Video content duration < = 5 mins |
| **Complex** | •No of Elements > 15, page tabs > 5 |
| •Data table more than (6\*6) |
| •Video content 3-4 |
| •Video content duration > 5 mins |

## 8.3 Tool Features:

|  |  |  |
| --- | --- | --- |
| Tool | Version | Features |
|
| [NVDA (Non Visual Desktop Access)](file:///C:\Users\532542\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\8RQSX5P9\URLs%20for%20Accessibility%20Audit_B2B.xlsx#RANGE!_Screen_readers) | 2019.3.1 | Windows freeware screen reader software that reads aloud the information in web pages and enables keyboard navigation. This is used by people who are visual disabled. |
| JAWS (Job Access With Speech Viewer) | JAWS 2019 | Windows commercial screen reader software that reads aloud the information in web pages and enables keyboard navigation. This is used by people who are visual disabled. |
| [CCA – Color Contrast Analyzer](file:///C:\Users\532542\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\8RQSX5P9\URLs%20for%20Accessibility%20Audit_B2B.xlsx#RANGE!_Color_contrast_Analyser) | 2.2a | CCA lets select a text color and a background color, then it shows the contrast ratio. |
| Voiceover | IOS | IOS inbuilt Screen reader software that reads aloud the information in web pages and enables navigation. This is used by people who are visual disabled. |

# Documents

|  |  |  |  |
| --- | --- | --- | --- |
| S.No | Reference Document | Version | Document/Link |
| 1 | Accessibility Checkpoints | NA |  |
|  |  |  |  |
|  |  |  |  |

# Tool Description

### Screen Reader

Software that processes content on the desktop and in web browsers, and converts it to others forms such as text-to-speech and Braille. Screen readers typically provide other functions such as shortcut keys, different modes for processing content and interacting with it, and the ability to highlight the text that is being read aloud.

Reference link

<https://www.w3.org/WAI/intro/people-use-web/browsing#perception>

### Color Contrast Analyzer

**Eye-dropper to select colors -** The tool lets you select a text color and a background color, then it shows you the contrast ratio.

**Contrast checks:**

* In the toolbar, select: Color > Contrast Analyzer [application]. Or, with the keyboard: Ctrl+Alt+5, then down arrow to "Contrast Analyzer [application]".
* The Color Contrast Analyzer application window opens.
* Using the first eye-dropper icon from the foreground color section, pick the foreground color (usually the text) you want to analyze.
* Using the second eye-dropper icon from the background color section, pick the corresponding background color.
* In the bottom of the Color Contrast Analyzer window, the resulting luminosity Contrast ratio will show (for example: 7.5:1), along with "Pass" or "Fail" and a visual example of the colors.

For more details, please find the below W3 link for reference

<https://www.w3.org/WAI/eval/preliminary.html#contrast>

# Glossary

|  |  |
| --- | --- |
| Term | Meaning |
| WCAG | Web Content Accessibility Guidelines |
| NVDA | Non Visual Desktop Access |
| JAWS | Job Access with Speech Viewer |
| CCA | Color Contrast Analyzer |