Software Maintenance, Evolution & Re-engineering Spring 2025 Individual Software Accessibility Assignment 2: Manual Testing

Assignment due date: April 19

Goal of the assignment

In this assignment, you will select two web pages and two mobile applications for manual testing to detect accessibility issues. **This is an individual assignment**; therefore, you are NOT to discuss your answers with other classmates.

Note: This a manual testing assignment; the use of any automated tools to detect accessibility issues is not allowed

Note: Keep in mind that the webpages and mobile applications you choose to evaluate during this assignment will be the same webpages and mobile applications you will need to assess during the Automated Testing Assignment.

Manual Testing: Webpages

Choose two of any of the given websites below:

- Agoda: https://www.agoda.com/
- NIH: https://www.nih.gov/
- Stack Overflow: https://stackoverflow.com/questions
- USPS: https://www.usps.com/
- UTD Website: https://www.utdallas.edu/
- Walmart: https://www.walmart.com/

For each website, you will provide three accessibility issues. For each accessibility issue, explain how it was found (e.g., using assistive technology or WCAG Success Criterion) and why it represents an accessibility issue.

Manual Testing: Mobile Applications

For this part of the assignment, you will need to first set up an Android Emulator using Android Studio (https://developer.android.com/studio). Follow the instructions in the manual carefully, the use of any other version will prevent you from finishing this and the next assignment properly.

After setting up the emulator, download two of the following APKs using APKPure (https://apkpure.com/), install them in the emulator, and manually check for accessibility issues (you can use any other APK Downloader, just make sure the version that is being downloaded is compatible with API 27 and with the architecture your emulator supports):

- CNN
- Gotify
- iHeart Radio
- UT Dallas Mobile App
- Zeus

Same as in Section 2, for each APK, you will need to provide three accessibility issues and explain how they were found and why they are accessibility issues.

Resources

- Android Studio: https://developer.android.com/studio
- APKPure: https://apkpure.com/

Deliverables

There is one deliverable for this assignment:

1. **PDF file:** It should include the websites and APKs chosen, the accessibility issues found for each, and the explanation as to why they are accessibility issues

Grading

Item	Points
Section 2	50
Section 3	50
Total	100

You will receive points off if:

- There are missing answers
- Your document contains typos and writing errors