Project scope document

Project name
Automate Web Accessibility Testing**.**

Project scope statement
This project aims to completely automate the web accessibility testing and make it more accurate and precise.

Introduction / Background to project

Accessibility aims to cater people of different problems like Visual Impairment, Physical Impairment, Hearing Impairment, Cognitive Impairment, Learning Impairment, elderly people and new users (computer illiterate),users using old system, users having restricted access, users having non-standard equipments etc. Successful web accessibility is about anticipating the different needs of all sorts of people, understanding our fellow web users and the different ways they consume information, empathizing with them and their sense of what is convenient and what frustratingly unnecessary barriers we could help them to avoid. There are several issues with accessibility like colour issues, content issues etc. which need to be removed by automated testing.

Deliverables

Automation of web accessibility testing

- Test automation can improve the development process of a software product. Automated Software testing can increase the depth and scope of tests to help improve software quality. Lengthy tests that are often avoided during manual testing can be run unattended.

Issues with Automated Accessibility Testing-

- Literal interpretation of guidelines.
- Cannot check any content issues.
- Cannot check many coding issues.
- Some tools follow outdated guidelines.
- Most guidelines aren’t properly checked.
- Warnings may be misinterpreted.
- Color Issues.
- Accurate testing of JavaScript, AJAX, Java and other Rich media is not possible.

Possible Solutions-

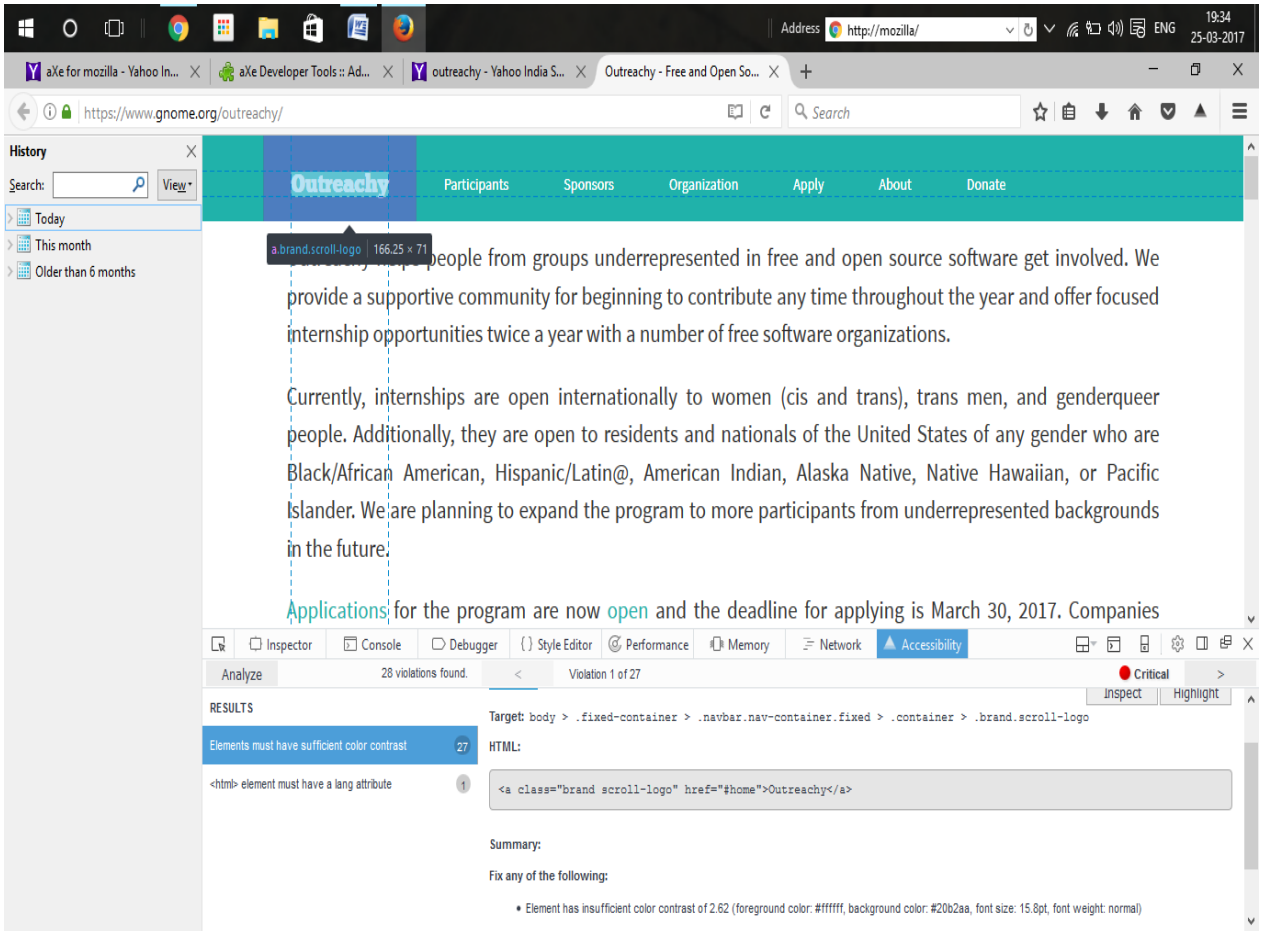
Tools for Accessibility Testing-

- WAVE

  Web Accessibility Evaluation Tool is a toolbar for Firefox browser. WAVE cannot tell if your web content is accessible, only a human can determine true accessibility. But WAVE can help evaluate the accessibility of our web content.
- Accessibility Valet
- Accessibility Checker
- Cynthia Says
- Eval Access
- Functional Accessibility Evaluator
- MAGENTA
- OCAWA
- TAW
- Web Accessibility Checker

- I think that out of all the available possible solutions, **aXe** is the mosr compatible with our requirements. aXe has a neat user interface. aXe is open source, lightweight, fast and portable library that maps the elements of website to accessibility standards. **aXe** provides us with a convenient explanation of the issue. It also pinpoints where the issue is located, and even references the Web Content Accessibility Guidelines 2.0 (**WCAG**).

- Screenshots of implementation of aXe extension –

- 
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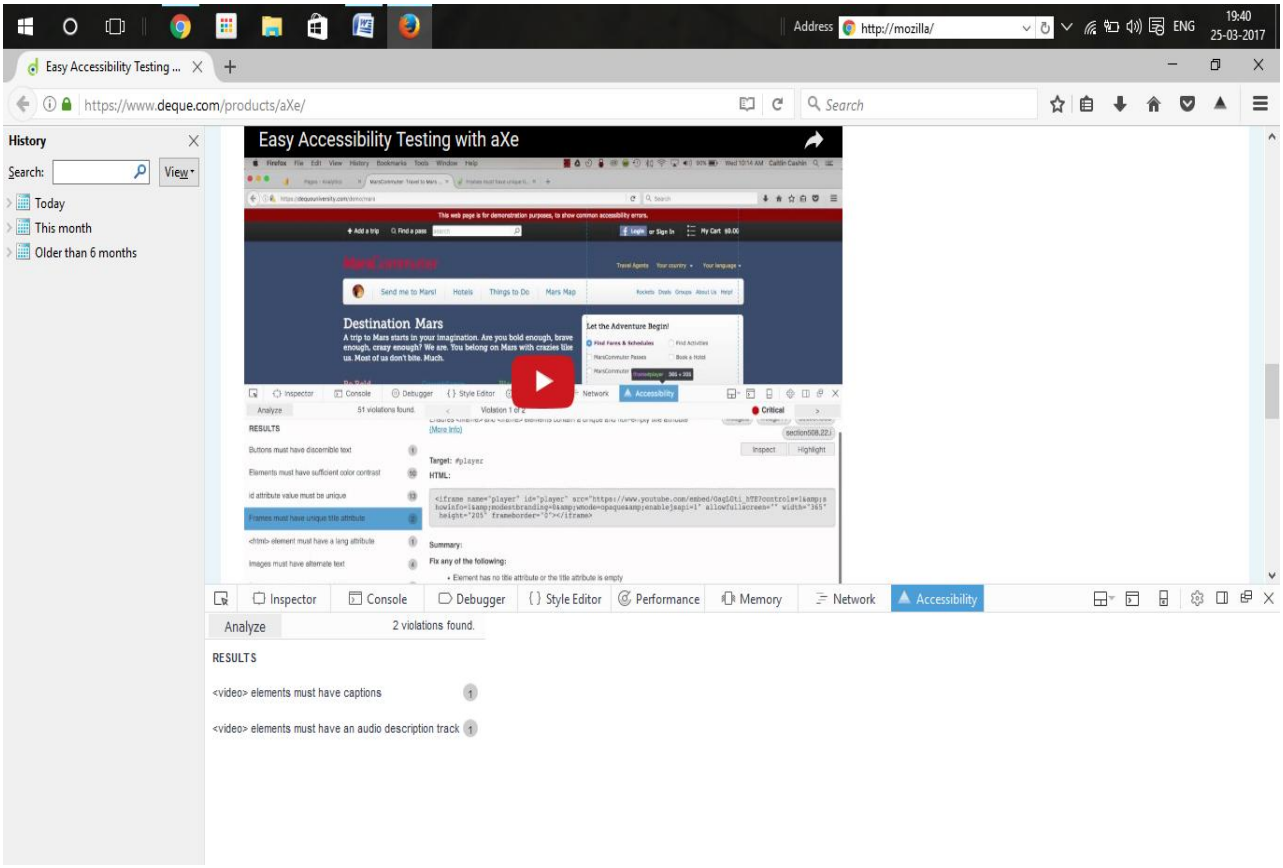
people from groups underrepresented in free and open source software get involved. We provide a supportive community for beginning to contribute any time throughout the year and offer focused internship opportunities twice a year with a number of free software organizations.
Currently, internships are open internationally to women (cis and trans), trans men, and genderqueer people. Additionally, they are open to residents and nationals of the United States of any gender who are Black/African American, Hispanic/Latin@, American Indian, Alaska Native, Native Hawaiian, or Pacific Islander. We are planning to expand the program to more participants from underrepresented backgrounds in the future.
Applications for the program are now open and the deadline for applying is March 30, 2017. Companies
Inspector
Console
Debugger
Style Editor
Performance
Memory
Network
Accessibility
Analyze
28 violations found.
Violation 1 of 27
Critical
RESULTS
Elements must have sufficient color contrast 27
<html> element must have a lang attribute 1
Inspect
Highlight
Target: body > .fixed-container > .navbar.nav-container.fixed > .container > .brand.scroll-logo
HTML:
<a class="brand scroll-logo" href="#home">Outreachy</a>
Summary:
Fix any of the following:
Element has insufficient color contrast of 2.62 (foreground color: #ffffff, background color: #20b2aa, font size: 15.8pt, font weight: normal)



Constraints

None

Key people / Key stakeholders

You could list here the main people involved and their responsibilities on this project - internal and external, as appropriate.

Project mentor-Matthew Brandt
Responsible for-

Client - Site users.
Responsible for-

Project support-Iqra Shaikh
Responsible for -

In scope

Accessibility Testing.

Accessibility aims to cater people of different problems like Visual Impairment, Physical Impairment, Hearing Impairment, Cognitive Impairment, Learning Impairment, elderly people and new users (computer illiterate),users using old system, users having restricted access, users having non-standard equipments etc. Web accessibility is about people. Successful web accessibility is about anticipating the different needs of all sorts of people, understanding our fellow web users and the different ways they consume information, empathizing with them and their sense of what is convenient and what frustratingly unnecessary barriers we could help them to avoid.