# Accessibility For Digital Contents & Services

Subash Acharya

03/21/2022

# Digital Accessibility to improve User Experience

- ❖ Nearly 20% (every 1 in 5) people in the world have some sort of permanent or temporary disability.

- ❖ 71% of disabled users don't use website or application simply because digital content is not accessible.

- ❖ Last year, more then 2000 websites accessibility lawsuits were filed by plaintiffs because they were not ADA (American Disability Act) complaint.

- ❖ Section 508 of the Rehabilitation Act of 1973 (29 U.S.C § 794 d) & American with disability act of 1990 (ADA)

| Disable Group | Common Problems with Digital Contents |
|---|---|
| Color Blind | • Only color is used as a unique marker to emphasize text on a Web site.<br>• Text that inadequately contrasts with background color or patterns. |
| Deaf | • Lack of captions or transcripts of audio on the Web, including webcasts.<br>• Lack of content-related images in pages full of text. |
| Low Vision | • Web pages with absolute font sizes that do not change.<br>• Difficult to navigate when enlarged, due to loss of surrounding context.<br>• Web pages, or images on Web pages, that have poor contrast.<br>• Text presented as images, which prevents wrapping to the next. |
| Motor Disabilities | • Time-limited response options on Web pages.<br>• Tools that do not support keyboard alternatives for mouse.<br>• Browsers and authoring tools that lack keyboard support for all commands. |
| Blind | • Images that do not have alternative text<br>• Complex images (e.g., graphs or charts) that are not adequately described.<br>• tables that do not make sense when read serially (in a cell-by-cell or "linearized" mode)<br>• Frames that do not have "NOFRAME" alternatives, or that do not have meaningful names<br>• Forms that cannot be tabbed through in a logical sequence or that are poorly labelled. |
| Seizure | • Use of visual or audio frequencies that might trigger seizure. |

# Affinity Mapping

## Designers/Architect

| Implement accessible Design Principles & Practices. |
| Universal Design Approach for accessibility. |

## Policies & Regulations

| Inform Laws & Policies (section 508 1973& ADA 1990) |
| Developing Organizational Policies. |
| Principles and Standard for accessibility. |

## Developers

| Developers module guide to maintain standard. |
| Overview of HTML5 accessibility |
| WAI-ARIA best practices. |

## Testers

| Identifying test tools. |
| Following standard reporting tools. |
| Training for testers. |

## Project Managers

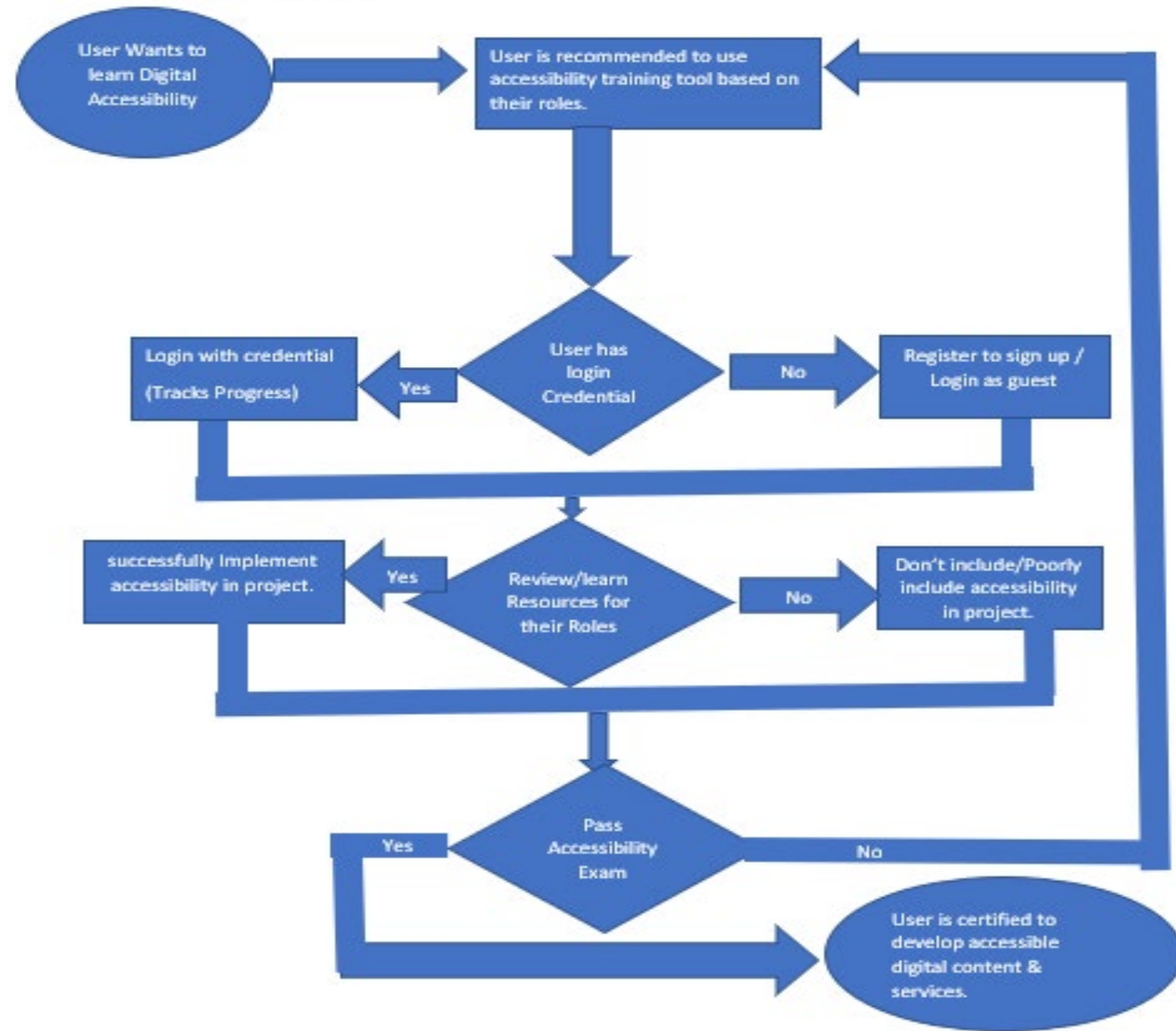| Evaluate digital accessibility in organization. |
| Planning & Managing accessibility in various projects. |
| Identify available resources and build team appropriately. |

## Community

| Some way to connect with community for contribution. |
| Option to Post, respond or view questions from other community members. |

# Flow Chart

# Persona:

❖ User is assigned to a project which is accessible to disable customers.

❖ User is trying to improve knowledge about digital accessibility to make product & services accessible to everyone.

❖ User is looking for a tool which provides various resources based on team roles.

# Problems Statement:

❖ Disable users can not get information they need because of physical or mental condition.

❖ Accessibility must be considered at each phase of Software Development Life Cycle.

❖ Team members must be trained to learn or improve their accessibility skillset to implement in project.

# Sketch

**Log in Page**

Username [                    ]

Password [                    ]

[ Log In ]

Sign Up

Continue as Guest

---

**Registration Page**

First Name [                    ]          Last Name [                    ]

Email [                    ]              Phone [                    ]

Username [                    ]           Password [                    ]

[ Register ]

Contact Us               News & Blog               Survey

---

**Resources Based on Roles**

[ Laws & Regulations ]     xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

[ Project Managers ]       xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

[ Testers ]                xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

[ Developers ]             xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

[ Discussion/Forum ]

Contact Us          News & Blog          Survey

---

**Discussion/Forum**

[ Laws & Regulations ]

[ Project Managers ]

[ Testers ]

[ Developers ]          [ View ]      [ Ask ]        [ Answer ]

[ Discussion/Forum ]

Contact Us          News & Blog          Survey

# Story Arc

- **Introduction**: Digital accessibility is important to share information &/or services for all including disable users to reach out to more users. Team members should have knowledge to implement accessibility in their project.

- **Incident**: Disable individuals have issue with getting information they need because of lack of accessibility. Team members might not have enough technical skillset about implementing accessibility.

- **Raising Action**: There are some instances of lawsuit action because of accessibility laws.

- **Climax**: Accessibility is the law not feature. Team members must get training based on their role to create accessible project.

- **Resolution**: This tool will provide training for our team members based on their roles and responsibilities. If possible, all disable groups should be addressed.

- **Conclusion**: We must consider accessibility while developing digital content or services. Accessibility must be considered every phases of SDLC.

# Service Experience

- ❖ Improve experience of disabled individuals while accessing digital information or services.

- ❖ Improve skillset of team members who are developing, enhancing or maintaining digital information and services.

# Wireframe & Prototype

▶ Please check [Wireframe & Prototype in Figma](#)

▶ Get copy of project  [Class Project in GitHub](#)

▶ **ANY QUESTIONS ?**