

Title:- Improving Accessibility Design

Problem Statement:-

Identify specialized users and related facilities for a selected product/system & make necessary suggestions for its improved accessibility design.

Learning Objectives:-

- To understand who are the specialized users & what problems they face.
- To capture functional and data-specific requirements.

Learning Outcomes:-

- We will have prepared requirement specification document.
- We will have mentioned requirements for specialized users.

Name of the Product : GitHub.

Theory:-

- About GitHub:

GitHub is a web-based hosting service for version control using Git. It is mostly used for computer code. It offers all of the distributed version control & source code management (SCM) functionality of Git as well as adding its own features. It provides access control & several

collaboration features such as bug tracking, feature requests, task management and wikis for every project.

- GitHub Users:-

→ Enterprise or any organisation:-

Any company or organisation can create an organisation on GitHub and host their code on it. They can have multiple repositories both public & private, under the same organisation account.

→ Development Teams:-

A group of developers can contribute towards a same project or repository & host their code on GitHub. This makes making changes to the source code easier & distributed due to version control feature of GitHub.

→ Individual developers or Students:-

Any individual can create an account and host their code there. An individual can create multiple private & public repositories under their account.

- Facilities:-

→ Public and Private Repositories (Unlimited as from Jan 2019)

Users can create unlimited public or private repositories and host them on GitHub. Repositories are files or rather directories which contain data and maintains version control of data.

b) Organisations & Teams:-

Users can create organisations which can host multiple code repositories. Admins can add members to the organisation by sending them requests, set permission rights of members and also divide members into teams & make teams as owners of particular repositories.

c) Version Control:-

GitHub allows version control same as git. The best part of GitHub is that it provides a user friendly interface for distributed version control & source code management.

d) Web Application Hosting:-

Git provides services to host websites which are static. Currently, GitHub supports HTML, CSS, JS based website or websites developed using Jekyll.

e) DevOps:-

GitHub offers a platform for handling DevOps. It provides code checking facilities via Travis CI. GitHub offers facilities for continuous development.

- Accessibility Design:

a) GitHub is free to use and available in WebApp & Mobile App versions, making it accessible and reliable.

b) A community of developers all around the world

contribute towards improvement of the application.

- ⇒ GitHub is easy to use platform. Multiple guides, documentation and wikis are available to guide users.
- ⇒ Command line tool is available through which you can access your remote repositories and also make changes to it.
- ⇒ keeps track of contributions of all contributors in terms of line of code changed, added or deleted.

- Suggestions:

a) Desktop Client for GitHub:-

→ Currently there is no desktop client for GitHub. A command line tool is available which enables user to access their repositories & make changes.

→ A desktop client will facilitate use, increase accessibility and thus discard need to memorize commandline command.

b) Allow dependents to be sorted by stars:-

→ Currently there is a dependent tab inside the Insights/Dependency Graph page. It tells how many repos and projects out there depend on a project.

→ If a project is popular, there can be hundreds of

dependents. It would be great to be able to sort those dependents by their stars.

- List of repos a user has contributed to on profile:-
- Many see GitHub profile as real measure to judge a developer's ability.
- If a user's contributions to project or repositories are shown on his/her profile it will boost their status.

Conclusion:-

Hence, I have identified specialized users & related facilities for a selected product/system & make necessary suggestions for its improved accessibility design.