

Software Requirements Specification

Glancify
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1 Introduction

1.1 Significance of this Document

This document would act as an input to the design phase of the project. The purpose of this document is to serve the project in terms of specifying the requirements of the project clearly. The needs of the project, scope and various functional and non-functional requirements are described in detail to ensure that the design phase is carried out with ease and with clear understanding of the concepts involved.

1.2 Target Audience for this Document

This document is intended for developers, testers, and documentation writers. The reader must go through System Specific Requirements and other non-functional requirements for detailed study of features proposed to be incorporated in the project.

1.3 Product Scope

This project has very wide scope, mainly because there are very few constraints. Any user, who has internet access and is socially active, can use this product. Also, the fact that social networking platforms are used all around the globe, the people who belong to the above defined set are from every corner of the world and thus, the scope of this project covers a wide range of users.

1.4 Overview

The requirement specification captures system requirements for the following areas:

- Functionality
- Usability
- Reliability
- Performance

- Supportability
- Design Constraints

2 Overall Description

2.1 What is the Problem?

The origin of this idea is the fact that, most of the people have accounts on multiple social networking platforms and, they prioritise the events happening on most of these platforms. Thus, to remain updated on their PCs or laptops, the person needs to open these websites, refresh them again and again, go to the notification panel and scroll through the notifications. Also suppose, if someone wants to get updates from three of the social medias, then he will have to open all the three in different tabs of the browser.

2.2 Product functions

- Notifications of all the logged in accounts on the new tab page of the browser, sorted and arranged according to its domain.
- Providing a GOTO button on the bottom of each card to redirect the user to the respective social networking platform.
- Providing an Add option, to add new cards that will refer to other social networking accounts.
- Providing a Remove option, on each card that will remove that card from the preferences of the user.
- Providing an option to click on the new tab button (Ctrl + T), and use the features of the extension.

2.3 Target Audience for the Project

The target audience for this project are all the socially active individuals throughout the globe, who use different kind of social networking platforms Facebook, Twitter, Quora, Github, etc.

2.4 Operating Environment

Software environment:

2.4.1 Current

- Google Chrome Extension

2.4.2 Future

- Firefox Add-on
- Desktop App

2.5 Assumptions and Dependencies

The assumption made here is that, the users use social networking platforms and appreciate remaining updated with their social lives. The user have moderate knowledge of using Internet and is familiar with using Web Applications.

2.6 User Documentation

A short video tutorial will be provided for getting to know the functionality of the system. Apart from this, we also plan to make the user manual available using ReadTheDocs, a VCS enabled documentation generation system. It will allow us to generate documentations in multiple formats on the fly; the formats themselves being PDF, EPUB, Kindle (MOBI), web-based etc.

2.7 Design and Implementation Constraints

Our project would be constrained under certain circumstances. These include:

- Designing a lightweight UI, so that the extension works properly.
- Material design will be used in UI designing.
- Team skills.

3 External Interface Requirements

3.1 User Interface

Following requirements have been gathered regarding the interface level design:

- The extension should be user friendly. The front-end part should not be overpopulated with unnecessary stuff.
- For the web app, we will be following material design conventions.
- If an event occurs, the user should be guided with a message dialog box displaying either the event is successful or an error has occurred.
- Flexibility to adjust size of each card in such a manner that even if there is a single card or there are multiple cards they all must be visible on the screen.
- Providing a "GOTO" button on the bottom of each card to redirect the user to the respective social networking platform.

3.2 Hardware Interface

This will be a Chrome Extension so, any hardware which can run the PC version of Google Chrome above 38.0.0 and have an internet connection, will be able to run this extension. In theory the extension will be able to run by all other devices that can emulate the PC version of Google Chrome above 38.0.0

3.3 Software Interface

The framework designed to fetch data from the web servers of social networking platform and displaying the content in extension in browser acts as an interface designed in HTML, JavaScript and CSS. The framework will use user credentials to generate Auth Token.

3.4 Communications Interfaces

This will be a Chrome extension, but may still link to web pages. This will be communicating with database server, so will be making use of the respective social network database and connecting it to the extension. The primary forms of communication will be database queries or requests. The system will need to integrate the extension for secure login of the different social networks. The application will need to be synchronized, so that the information displayed to the user is always up to date.

4 Functional Requirements

4.1 Your Name

- Description: Very first time when user installs the extension, extension will ask for his/her name. If he/she provides the name, further on whenever he/she will reopen the new tab/browser, It will show "Welcome ¡User Name¿".
- Priority: Medium
- Stimulus/Response Process:
Input: Enter the Name and Press Enter.
Output: Shows "Welcome ¡Name¿".
Process: Save provided name to storage.

4.2 Add

- Description: If a user wants to link a new account with the extension, then he can click on the add button and go to the Select the Media procedure.
- Priority: High
- Stimulus/Response Process:
Input: Click on the button
Output: "Select the Media" popup.

4.3 Select the Media

- Description: A popup with the list of various social networking platform.
- Priority: High
- Stimulus/Response Process:
Input: Select a social networking platform or close the popup.
Output: open the login popup of respective social networking platform.
Process: Show Username and password field.

4.4 Login

- Description: The users are required to login into their social media accounts of which they want to add as card on their new tab page.
- Priority: High
- Stimulus/Response Process:
Input: Respective account username and password.
Output: Displays message if username and password does not match otherwise adds the card and shows the notifications.

Process: Request through API to login and save the login details to cookies.

4.5 Remove

- Description: Removes the card and logs the user out from that social networking platform.
- Priority: High
- Stimulus/Response Process:
Input: Click to remove button.
Output: removal of the card and logging out the from the respective account and readjust the alignment and orientation of the cards.
Process: Request through respective API to log out the user and remove that card from the new tab page.

4.6 GOTO

- **Description:** Redirect the user to the corresponding social networking site.
- **Priority:** High
- **Stimulus/Response Process:**

Input: Click on the GOTO button.

Output: Open the corresponding social networking website on the current tab.

Process: Fetch the link of respective social networking website and requests for that web page.

4.7 Redirect to webpage by clicking on notifications

- **Description:** Redirect the user to the corresponding social networking site.
- **Priority:** High
- **Stimulus/Response Process:**

Input: Click on any notification.

Output: Open the corresponding post to the notification on social networking website on the current tab.

Process: Fetch the link of respective notification and requests for that web page.

5 Non-functional Requirements

5.1 Performance Requirements

- **User Satisfaction:** The application must be such that it stands up to the user expectations.
- **Response Time:** The response of all the operation should be good.

- **Error Handling:** Response to user errors and undesired situations has been taken care of to ensure that the application operates without any uncertainty.
- **User friendliness:** The application is easy to learn and understand. A naive user can also use the system effectively, without any difficulties.

5.2 Reliability

The extension is capable to maintain the specified level of performance. It will run on all PC version of Google Chrome above 38.0.0. (Version to be taken care). Itll be reliable and authenticated by Google.

5.3 Availability

Ours is a web based application so generally it will only work if one is connected to the Internet. This will work for Browser extension. The extension will run 24*7 if the internet connection is available and if Google Chrome is open.

5.4 Portability

Since, we are making a Chrome extension. This can be easily used on any operating system like windows, linux, mac os, which support PC version of Google Chrome.

5.5 Safety Requirement

As such, there are no safety requirements with this product, other than any normal hazards of a PC or laptop. The only hazard is the user using their PCs or laptops for a long time, which they should not do, as this can affect their eyesight and other health issues.

5.6 Security Requirement

The software should provide a secure login to every individual user to every single social network, as the user is providing his/her accounts credentials. Additionally, the server side is to be regularly maintained and saved

by the malicious attacks. Talking about the physical security options, the user should himself/herself take care that no other user uses his/her login account and extract their personal data.

5.7 Business Rules

5.7.1 User Role

The user should feel responsible for securing his/her login account from other users.

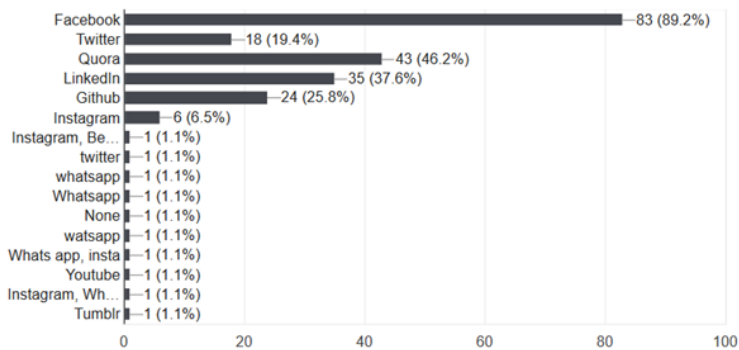
5.7.2 Developer Role

The developer should understand his/her role in creating the application which should not exploit the rights of individuals and should design the software according to these needs of the user and not for any unrelated issues. Its his duty to understand that the kind of information and the data that is to be associated with the application is important to the users and it must be trusted at the same time.

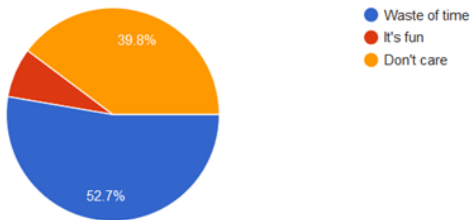
6 System Requirement Gathering

The procedure, we followed to gather system requirements was the survey through Google Forms. The survey was designed in such a manner that we can get response from every sector. This helped us greatly in deciding what features should we implement, what the system should be capable of and, where to implement them. The survey statistics are discussed in this section. We have taken the survey which includes the following questions. There were total of 94 responses for these questions.

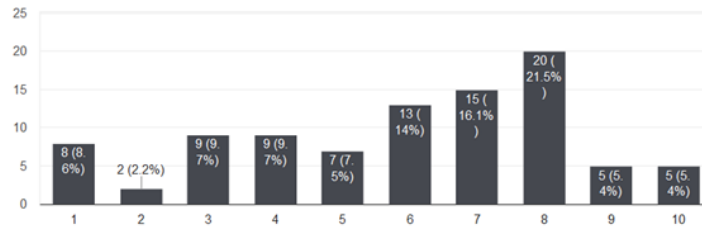
Which Social Networking Platform do you frequently use?



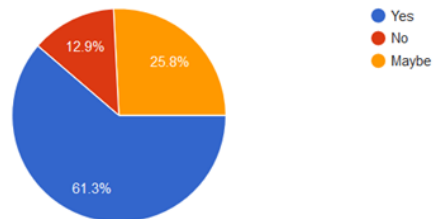
How do you feel opening websites every time to look same old notifications?



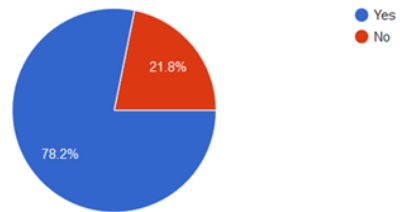
How frequently do you scroll through the Notifications of your Social Networking Accounts?



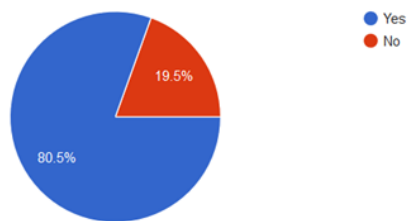
Do you feel the need of Organising the huge wave of Notifications you get when you connect to the Internet after a long time?



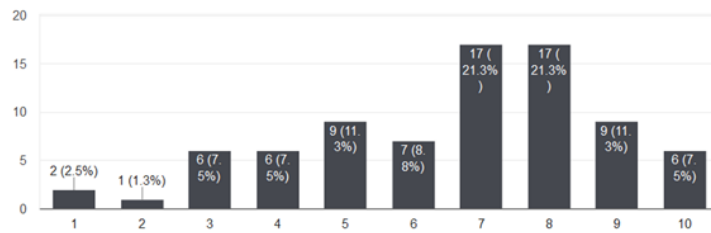
Would you like to have a glance on notifications of all your Social Networking Platforms in just one click?



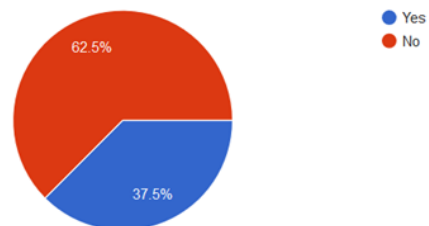
Do you think it will save your time?



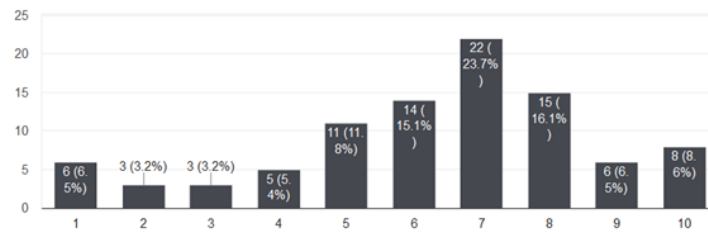
On a scale of 1 to 10 how much time do you usually spend on your Browser while you are connected to the Internet?



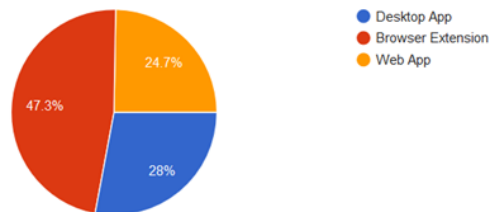
Do you use Desktop Apps for the Social Networking Platforms like Facebook, Twitter, Instagram, etc?



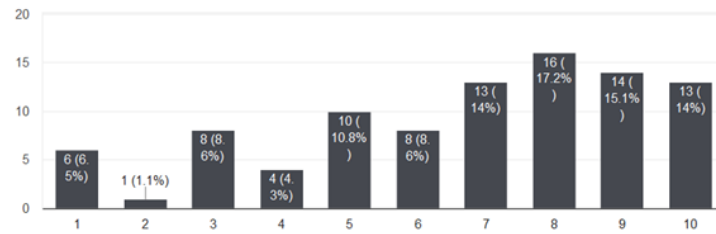
On a scale of 1 to 10, how much of a utility it would be if you get an option of viewing your notifications for all of your accounts on the new tab page(whenever needed) of your browser?



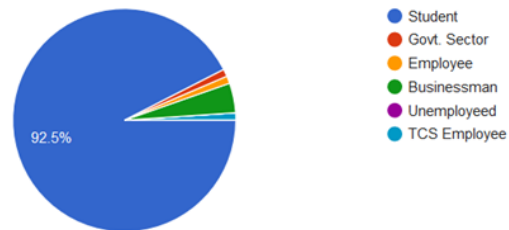
On which platform would you like to get the Notifications of your Social Networking Accounts?



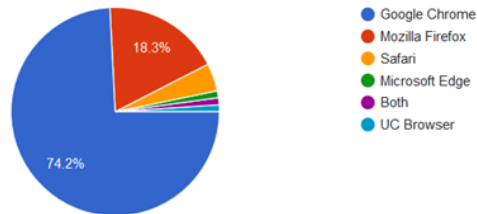
On a scale of 1 to 10, how much irritating will it be for you to minimise all your work and open a desktop application every time you want to check your notifications?



What is your profession?



Which browser do you prefer?



7 Appendix A: Glossary

Extension Extension refers to Browser extensions that are being developed in this project. These include Chrome, Firefox and possibly Safari extension.

ReadTheDocs An online site to host documentations, supports VCS.

VCS Version Control System. Used to keep track of changes in a document.

Web App Web Application, a website with interactive features.