

Software Requirement Specification (SRS)

Timely

(Google Chrome Extension)

0. Preface

This is the software requirements specification (SRS) document of the google chrome extension Timely. This document has been created after interacting with the client. The intention of this document is to provide the categorized information regarding the requirements for the software being developed and will explain what the system will do, the features of the system, the constraints under which it must operate. This document will be accessible to developers, project managers, testers & team and will work as an agreement between the project personnel and the client. This document also serves as a basis for future enhancements and modifications.

1. Introduction

1. a) Context

Nowadays everyone who is operating either a laptop or a personal computer is facing a problem, that is they are not able to track the amount of time they spend on their browsers on each website they visit. Ultimately, lead them to be less productive throughout the day. Therefore, we have come up with an google chrome extension 'Timely' which will resolve this problem as now the user/consumer can get the details/analytics of the time spent by him/her on a particular website. Thus, our focus, as a software development project is to develop an extension that will increase the productivity of the user.

1. b) Problem Specification

We require an google chrome extension to allow the users to track their daily time spend on each website they visit. There should be a way to add/edit restriction on websites, set ignore list of domains, set notification time on websites and also it should store the users' time spent on each website so as to present the analytics to the user.

1. c) Scope of the document

The scope of the document is to build a software system that will be an google chrome extension. The scope of this software is pan world, its purpose being facilitating the user along with managing a real-time google chrome database so as to make the process simple and easy to use. Though being made specifically for the tracking of user activity on google chrome, this software, through appropriate modifications, can also be adapted to various other browsers.

1. d) Summary/overview of the document and its structure

The General Description section is the next part of document that gives an overview of the functionality of the product. Then the section namely Functional Requirements describes the functionalities in the software. Then the two sections, namely Interface and Performance Requirements, further give us a rough estimate of the requirements from the point of view of the user. The section, Non-Functional Requirements describes the quality attributes which must be achieved by the software along with the measures which can be applied to check their presence. Finally, the document talks about Scheduling and the Budget cost regarding the whole project.

2. General Description

2. a) Workflow

- The user (on clicking the extension icon) is directed to the main/landing page of the extension.
- Now, the user is shown the web analytics of today (by-default).
- Based on user selection, Users should be able to see the tracking details of today or all time or last week data.
- The user also has an option to go to the settings page. The user has the following options:
 - If the user checks the dark mode option, the user interface will be changed to dark mode.
 - If the user is on the notification block and adds a URL/domain of website in that block then after that specified period of time the user will be notified.
 - If the user is on the restrictions block and adds a URL/domain of website in that block then that particular website will get blocked after that period of time.
 - If the user is on the ignore list block and adds a URL/domain of website in that block then that particular website will not be tracked.

2. b) Use-Cases/ User Scenarios

● Web analytics:

This is the main use case/user scenario of our project, the user will be provided his web analytics of 'all days' activity, 'last week' activity and 'today' activity. The user will also be able to see pie chart of his activities, it will also be shown in the tabular form if he wants to see number of visits, time spent per website etc.

● Settings and customization:

This scenario includes set theme, set notifications, set restriction limits, set ignore list etc. options in the settings page.

2. c) Overall description of the software product

The software will be an extension that will show the user their time spent on each website he/she visit. The software will be able to tell the user the different categories of tracking details like in form of graphs and tabular data in each category 'today', 'all-time', and 'last week' in the application. It will also manage a google chrome database to keep the track of websites time spent data of the user.

3. Functional Requirements

- If checkbox of set theme is unchecked then light theme will be set and if it is checked then dark theme will be set.
- Notifying users with message when that particular site has reached its set limit.
- Restricting users with using particular website when that website has reached its particular set limit.
- Ignoring some websites from tracking its activities if those websites are added into ignore list by user.
- Presenting the graphs/tabular data to the user showing the time spent by them on each website.

4. Interface Requirements

Hardware Interface:

- Laptop/personal computer having following component -
- VDU (Video Display Unit)

Software Interface:

- Google chrome browser.
- User-friendly navigation and user interface.

5. Performance Requirements

- Extension loading time should be minimal
- Updation and Retrieval should take minimal time

6. Design Constraints

- Should be compatible with different screen sizes.
- Should be user friendly and allow users to learn how to use the extension easily.

7. Non-Functional Requirements

- **Security:** The user data will not be manipulated.
- **Learnability:** The UI will be easy to understand and accessible for the user

7. a) Measures

- **Security:** The database of the user activity is stored in chrome local database only; it is not getting transferred from anywhere else.
- **Learnability:** Time taken by first-timers to accomplish a certain task can be recorded and compared. Further, a learning curve of average time taken to complete a certain task over various trials can also be plotted to measure the software's learning efficiency.

8. Schedule and Budget Estimates

We can break the tasks in different categories that includes:

Requirement analysis (Interaction with Client, Preparation of SRS document), **Planning & Design** (Design Specification, Tech Stack, GUI), **Implementation & Coding** (Individual module implementation, Database, Integration, Initial testing), **Testing** (Component testing, System testing, Retest), **Deployment**.

Budget:

Team	Members	Period	Annual Package	Cost to Company
Analyst	1	10 days	10 LPA	27,398
Designer	2	15 days	20 LPA	1,64,384
Developer	2	45 days	25 LPA	6,16,438
Tester	2	15 days	15 LPA	1,23,288
Project Manager	2	40 days	35 LPA	7,67,123
Maintainer	2	15 days	20 LPA	1,64,384

Net expenses: Rs. 18,63,015