

Glimpse

Requirements and Specification Document

Date: 12th March, 2024

Version: 1.0

Team members' details:

1. Raman Sharma - 22114076

Contact No: +91 75218 29455 Email ID: raman s@cs.iitr.ac.in

2. **Boda Yashwanth - 22114022**

Contact No: +91 89779 25111 Email ID: boda_y@cs.iitr.ac.in

3. Ayush Ranjan - 22114018

Contact No: +91 74829 58551 Email ID: ayush_r@cs.iitr.ac.in

4. Souvik Karmakar - 22114096

Contact No: +91 86429 24659 Email ID: souvik_k@cs.iitr.ac.in

5. Sarvasva Gupta - 22114086

Contact No: +91 79899 04811 Email ID: sarvasva_g@cs.iitr.ac.in

6. Anvit Gupta - 22114009

Contact No: +91 94620 11044 Email ID: anvit_g@cs.iitr.ac.in

7. Vineet Kumar – 22114107

Contact No: +91 92634 36403 Email ID: vineet_k@cs.iitr.ac.in

Project Abstract

Project Glimpse is a Chrome extension that supercharges your browsing experience. It tackles online clutter and inefficiencies with a customisable home page featuring motivational quotes, to-do lists, organised bookmarks, and personalised wallpapers.

Glimpse further streamlines navigation with features like scrollable website previews, estimated reading times, and seamless bookmarking. Advanced options (powered by AI/ML) can group bookmarks by sentiment and summarise webpage content for deeper understanding.

Project Glimpse empowers users to:

- Save time: Efficiently evaluate websites before opening.
- Stay organised: Manage tasks, bookmarks, and information in one place.
- Focus on content: Minimize distractions with a customisable view.
- **Grasp complex content (Optional):** Gain insights with summaries (powered by AI/ML).

By promoting efficiency, organisation, focus, and understanding, Project Glimpse unlocks a more productive and enjoyable browsing experience.

Document Revision History

Rev 1.0 on 12 March 2024 - Initial Version

<u>Customer</u>

Project Glimpse offers a comprehensive suite of features that empower various Chrome users. Here's a breakdown of how it benefits specific target audiences:

- Students & Researchers: They juggle multiple tasks, research extensively, and manage large bookmark collections. Glimpse's organization and navigation features, like to-do lists, categorised bookmarks (potentially using AI/ML), and website summaries, streamline their workflow.
- Professionals: Fast-paced work environments demand efficient time management.
 Glimpse addresses this with features like to-do lists, simplified web previews to
 minimize distractions, and quick website evaluation tools, allowing professionals to
 stay focused and maximise productivity.
- Casual Internet Users: Anyone who uses Chrome to browse can benefit from Glimpse's organisational tools. Managing bookmarks, quickly assessing websites with

summaries and previews, and a central location for to-do lists all contribute to a smoother browsing experience.

Dummy Customer: Sarah, the Information Architect

Demographic Information:

• Age: 25

• Occupation: Information Architect

• Location: Suburban

Psychographic Information:

Values efficiency and clear information hierarchy.

• Seeks tools that enhance information organization and streamline content consumption.

Needs and Pain Points:

- Often encounters information overload while researching online.
- Struggles with managing and categorising a vast number of bookmarked websites.
- Finds it time-consuming to evaluate the relevance of search results before opening them.

Behaviors and Preferences:

- Actively seeks out tools that improve information organisation and content consumption.
- Prefers intuitive interfaces with clean aesthetics and customizable features for personalised workflows.

User Goals and Expectations:

- Aims to improve research efficiency and reduce wasted time evaluating irrelevant websites.
- Expect Glimpse to provide clear website summaries, facilitate bookmark organisation, and offer a clutter-free browsing experience.

User Experience Considerations:

- Values clear presentation of information with a focus on usability.
- Seeks a visually appealing extension that integrates seamlessly with her existing workflow.

This revised version highlights the target customer segments and provides a more detailed dummy customer persona named Sarah, reflecting the needs and preferences of information architects like her.

Competitive Landscape

Identifying competitors in the market for the described browser extension involves researching existing solutions that offer similar features.

Competitors in the market:

1. OneTab:

Strengths:

- a. One Tab consolidates open tabs into a single list, improving browser performance.
- b. Allows users to export and import tab lists.

Weaknesses:

- a. Limited bookmark management and tagging capabilities.
- b. Lacks a built-in To-do list feature.

2. Pocket:

Strengths:

- a. Enables users to save articles, videos, and web pages for later viewing.
- b. Provides a clean and distraction-free reading environment.

Weaknesses:

- a. Focuses on content saving rather than a comprehensive bookmark and Todo list management.
- b. Limited support for website previews.

3. Raindrop.io:

Strengths:

- a. Robust bookmark management with folder organization and tagging.
- b. Supports collaborative bookmarking for teams.

Weaknesses:

- a. Limited To-do list integration.
- b. Website previews may not be a primary focus.

Competitive Differentiators:

- 1. **Comprehensive Integration:** The extension should offer an all-in-one solution, combining robust bookmark management, To-do lists, and website previews in a seamless manner.
- 2. **Resource Optimization:** A key differentiator can be the efficient generation of website previews, minimizing resource consumption compared to competitors.
- 3. **Cross-Platform Synchronization:** Providing a seamless experience across multiple devices through efficient data synchronization can set the extension apart from competitors.
- 4. **Advanced Search and Filtering:** Implementing a sophisticated search and filtering system for bookmarks and tasks can be a competitive advantage.
- 5. **Accessibility Features:** Focusing on accessibility standards and features will differentiate the extension by making it more inclusive for users with diverse needs.

Competitive Barriers:

- 1. **Patent Position:** Investigating the possibility of obtaining a patent for unique aspects of the extension, especially concerning resource optimization and website preview technology.
- 2. **User Experience Design:** Investing in a highly intuitive and user-friendly design can create a barrier as users may be hesitant to switch to a new solution if it requires a steep learning curve.
- 3. **Security Measures:** Implementing robust security measures to protect user data can be a significant competitive barrier, especially in an age where privacy and data security are paramount.

System Requirements

Functional Requirements:

1. UI Enhancement:

- a. The extension should provide an improved user interface for a seamless browsing experience.
- b. Users should be able to customize and personalize the appearance of the browser extension.

2. Bookmark Management:

- a. Users can add bookmarks to different sites.
- b. Bookmark entries should include tags for easy categorization and retrieval.

3. To - do List Integration:

- a. The extension should have a built-in To-do list feature for users to manage tasks.
- b. Users can associate tasks with specific websites or bookmarks.

4. Website Miniature Preview:

- a. The extension should generate a miniature preview of websites.
- b. Users can view the preview without opening the entire website, helping to reduce resource consumption and timesaving.

5. Search and Filtering:

- a. Users should be able to search and filter bookmarks based on tags and other criteria.
- b. The search functionality should extend to the To-do list as well.

6. Offline Mode:

- a. Basic functionality (e.g., viewing bookmarks and tasks) should be available in an offline mode.
- b. Syncing with the cloud should resume once the user is back online.

Non-functional requirements:

1. Performance:

- a. The extension should load quickly and operate efficiently, ensuring a smooth user experience.
- b. Website previews should be generated promptly to minimize user wait times.

2. Compatibility:

- a. The extension should be compatible with popular browsers such as Chrome, Firefox, and Edge.
- b. Compatibility updates should be provided as new browser versions are released.

3. **Security:**

- a. User data, including bookmarks and To-do lists, should be securely stored and transmitted.
- b. The extension should not compromise the security of user browsing activities.

4. Scalability:

- a. The extension should be scalable to accommodate a growing number of bookmarks and To-do list items.
- b. Resource usage should remain proportional to the scale of data managed by the extension

5. Customization:

- a. Users should have the option to customize the appearance and behaviour of the extension to suit their preferences.
- b. Customization settings should be intuitive and easy to access.

6. Accessibility:

- a. The extension should adhere to accessibility standards to ensure usability for users with diverse needs.
- b. Features like keyboard shortcuts and screen reader compatibility should be implemented.

These requirements aim to create a robust and user-friendly browser extension that enhances the browsing experience while maintaining performance and security standards.

User Interface Requirements:

- **Clean and intuitive design:** Prioritize a clear and user-friendly interface that is easy to navigate and understand, even for non-technical users.
- **Consistency:** Maintain consistency in layout, colour scheme, and iconography throughout the extension.
- **Responsiveness:** Ensure the UI adapts seamlessly to different screen sizes and resolutions.
- **Focus on essential information:** Quickly access personalized quotes, manage your to-do list, and organize bookmarks all presented in a way that promotes focus.

Use Case Prioritization:

To meet the project deadlines and customer expectations, the following prioritisation of use cases has been defined:-

Must-have Use Cases:

- Distraction-free User Interface
- Bookmarks management

- To-do list
- Fast website preview by hovering over the link

These are the most important use cases decided based on the limited time limit and customer's expectations.

Optional Use Cases:

- Website summariser
- Malicious website detector

These optional features will be implemented based on the time left after completing with the implementation of 'Must-have' use cases.

In conclusion, these system requirements provide a comprehensive specification for Glimpse project. They encompass functional and non-functional aspects, ensuring the application's development aligns with customers' expectations and market demands. Regular communication with customer will help in refining these requirements as the project progresses.