Software requirement specification (SRS) document template

Project name: Scriptoria

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Revision history

Version	Author	Version description	Date completed
1.0.0	Omar Khalili	This version is the base of our website	10/03/24

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① Introduction

The purpose of this Software Requirements Specification document is to present a detailed description of the development of Scriptoria, a collaborative writing platform which aims to provide creators with tools for collaborative storytelling, community engagement, challenges, and interactive features. The document outlines the functional and non-functional requirements of the platform, alongside the purpose, features and functionality of the system. It is a comprehensive guide for the project managers, stakeholders and development team.

1.1 Product scope

scope:
Scriptoria aims at providing a valuable and engaging experience for its audience. It will present users with a wide variety of features to ensure alignment with its vision and purpose
Features include:
      User Registration and Authentication:
            Users register with Scriptoria using their email addresses or social media accounts.
      Profile creation and customization:
            Users specify their interests through customizing the desired profile.
      Reading stories:
            Stories include various formats (text, image, audio), as well as different genres and story styles.
      Story creation and publishing:
            Users benefit from our story creating tools, and publishing methods.
      Collaborating:
            Users collaborate in the process of creating.
      Challenges:
            Users compete in a wide range of contests and challenges to explore their full potential.
      Community engagement:
            Users interact with social features such as following, commenting, liking, rating stories and offering feedback.

Goals and objectives include:

Engage the Community:

Scriptoria aims at building a vibrant community of creators and readers who actively participate in challenges, contests, discussions, and feedback, creating a dynamic and interactive environment.

Enable Collaborative Storytelling:

Scriptoria aims at providing a platform where creators can collaborate on comic books and stories, fostering creativity and teamwork.

Establish a Positive Community Culture:

Scriptoria aims at fostering a positive and inclusive community culture where users feel valued, respected, and inspired to create and share their stories and artwork.

Timeline: Every one or 2 weeks we will be out with a new version Not all the version are determined because we are working with agile method but the estimated time to finish this project is about the end of MAY to the start of JUNE.

Budget: No money needed to startup this project its all about time and management.

management method:

Agile methodology will be employed for the development and management of Scriptoria. This approach allows for iterative development, frequent collaboration with stakeholders, and adaptation to changing requirements. Key elements of Agile methodology include:

Sprints: Work will be organized into short, time-boxed iterations (sprints) typically lasting two weeks each. This enables the development team to focus on specific tasks and deliver incremental improvements.

Daily Stand-up Meetings: The development team will hold daily stand-up meetings to discuss progress, obstacles, and plans for the day. This fosters communication and ensures everyone is aligned towards project goals.

Iterative Development: The platform will be continuously refined and improved based on user feedback and changing requirements. Regular demos and feedback sessions will be conducted to gather input from stakeholders.

Cross-functional Teams: The development team will consist of cross-functional members including developers, designers. This ensures a diverse skill set and collaborative problem-solving.

Adaptation: The team will embrace change and adapt to evolving priorities throughout the development process. Feedback from stakeholders and end-users will be incorporated to ensure the final product meets their needs and expectations.

1.2 Product value

value:
Audience will find value in the following:

Scriptoria stands out for its emphasis on
Collaborative Storytelling, as It enables creators to work together on projects, co-create stories, and engage in collective storytelling experiences, fostering creativity, teamwork, and shared ownership of content.

It prioritizes
Community Engagement through offering a strong sense of community among creators and fans, enabling meaningful interactions, discussions, and collaborations. Users can connect, share, and engage in feedbacks. as well as taking part in challenges and contests. This active community fosters a sense of belonging and builds lasting relationships and a supportive community

It focusses on celebrating
Diversity and inclusivity through a rich exchange of stories, perspectives, and artistic styles. It provides a platform for creators to share diverse stories, characters, and perspectives. This diversity enriches the content available to readers, making it a unique for global collaboration and cultural appreciation within the creator's community.

It also centers a focus on
Discovery and Recognition where Aspiring creators can leverage Scriptoria to be discovered, build a fanbase, and gain recognition for their work. The platform facilitates exposure, feedback, and opportunities for creators to showcase their talent, grow their audience, and establish their presence in the industry.

Personas:
Persona: Creator "name"
Background: "name", 27 years old, a freelance artist and writer.
Goals: Collaborate on projects, share work, receive feedback.
Preferences: Experienced in digital art, active in comic creator communities, values feedback and recognition.

Needs Met by Scriptoria: Collaboration tools, community feedback, **monetization options**, exposure to wider audience.

Persona: Comic Collector "name"
Background: "name", 18 years old, a passionate comic book reader and collector.
Goals: Discover new comics, engage with community, participate in events, share favorites.
Preferences: Enjoys reading platforms, active in fan communities, attends comic conventions.
Needs Met by Scriptoria: Comic discoveries, community engagement, event participation, sharing favorite comics.

Persona: Writer "name"
Background: "name", 32 years old, a writer exploring comic storytelling.

Goals: Develop writing skills, collaborate with artists, publish work, connect with readers.
Preferences: Writing enthusiast, seeks collaboration opportunities, values reader interaction.
Needs Met by Scriptoria: Writing resources, artist collaboration tools, publishing platform, reader feedback.

Persona: Aspiring Creator "name"
Background: "name", 20 years old, a writer exploring comic storytelling.
Goals: Showcase talent, gain exposure, build fanbase, seek a wide audience.
Preferences: Active on social media, seeks mentorship, values feedback.
Needs Met by Scriptoria: Exposure to wider audience, community engagement.

Persona: Diverse Style Sharer "name"
Background: "name", 21 years old, a writer with a unique sense of style.
Goals: Share unique styles, promote diversity, collaborate, connect.
Preferences: Creates diverse content, engages in diversity discussions, share cross cultural stories.
Needs Met by Scriptoria: Platform for diverse content, community support, and cross-cultural exchange.

1.3 Intended audience

Intended Audience:
By defining the intended audience in the SRS document, stakeholders and development teams can align their efforts to meet the needs and expectations of these key user groups, ensuring a user-centric and effective platform.

Primary Users:
- Creators: Individuals passionate about creating stories, including writers, artists, and storytellers, seeking a platform to showcase their work, collaborate with peers, and engage with a community of enthusiasts.

- Aspiring Creators: Individuals aspiring to be discovered, build a fanbase, and showcase their creative talent, seeking opportunities for mentorship, collaboration, and recognition within the creator community.

- Story Enthusiasts: Fans of stories and graphic novels, including readers, collectors, and enthusiasts, looking for a platform to discover new stories, engage with creators, participate in discussions, and share their interests with others.

- Writers: Writers and scriptwriters interested in creating comic scripts, dialogues, and narratives, collaborating with artists and creators, publishing their work, and engaging with readers and fellow writers.

Stakeholders:
- Investors: These stakeholders provide financial resources to the platform in exchange for equity or a return on investment. They are interested in the platform's growth potential, revenue generation, and overall profitability.

- Developers: The development team comprises software engineers, programmers, and developers responsible for designing, coding, and maintaining the platform's technical infrastructure, features, and functionalities. They ensure that the platform operates smoothly, securely, and efficiently for users.

- Testers: Quality assurance testers and testing teams play a crucial role in ensuring the platform's reliability, functionality, and user experience. They conduct testing, identify bugs, errors, and performance issues, and collaborate with developers to address and resolve issues promptly.

- Project Managers: Project managers oversee the planning, execution, and delivery of the development projects. They coordinate tasks, timelines, resources, and priorities, ensuring that projects are completed on schedule, within budget, and according to quality standards.

Stakeholders contribute resources, funding, expertise, and support to ensure the platform's sustainability, innovation, and alignment with industry trends and opportunities.

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- Filmmakers: Creators of film and visual media looking for compelling content to adapt, draw inspiration from comics for storytelling, visuals, and characters, and collaborate with comic creators on potential adaptation projects.

- Graphic Designers: interested in finding inspirations for graphic designs, illustrations, and visual storytelling's, looking to create artwork, covers, and illustrations for Scriptoria users.

1.4 intended use

Creators:
Intended Use: Create, publish, and showcase original comic content, collaborate with other creators, engage with fans, and explore monetization opportunities.
Workflow:
Create new comic projects, upload artwork, and add story content.
Collaborate with other creators by inviting them to collaborate on projects.
Engage with the community by sharing updates, responding to comments, and participating in challenges.

Story Enthusiasts:
Intended Use: Discover, read, engage with creators, participate in discussions, and share favorite comics with other enthusiasts.
Workflow:
Browse the website to discover new stories based on genres, themes, and recommendations.
Read and follow favorite stories, leaving likes, comments, and ratings for creators.
Engage with creators by joining discussions, participating in challenges, and sharing stories with friends.
Explore community events, contests, and fan interactions to connect with fellow enthusiasts.

Writers:
Intended Use: Write scripts, dialogues, and narratives, collaborate with artists, and engage with readers and fellow writers.
Workflow:
Access the scriptwriting tools and templates on Scriptoria to create comic scripts.
Collaborate with artists by sharing scripts, discussing visual concepts, and refining storytelling.
Publish completed scripts for feedback from readers, fellow writers, and the community. Engage in discussions, workshops, and writing challenges to improve skills and connect with peers.

Stakeholders Involvement:
- Project Managers:
Intended Use: Project managers use Scriptoria to oversee, plan, and deliver projects within the platform, ensuring alignment with organizational goals and quality standards.
- Developers:
Intended Use: Developers use Scriptoria to design, code, and maintain the platform's software, features, and functionalities.
- Testers:
Intended Use: Testers use Scriptoria to evaluate the platform's functionality, usability, and performance through systematic testing methodologies.
Investors:
Intended Use: Investors use Scriptoria to monitor the platform's performance, growth metrics, user engagement, and monetization strategies to make informed investment decisions

1.5 General description

Scriptoria is a web-based platform designed to serve as a creative space for storytelling enthusiasts, creators, and fans. The platform offers a wide range of features and tools tailored to facilitate collaborative storytelling, engagement, and (monetization) within the comic creator community.

Key features of Scriptoria include:
Discover and Explore: Users can discover a vast library of stories, explore new genres, and find hidden gems based on personalized recommendations and trending content.

Collaborative Creation: Creators can collaborate seamlessly on projects, share ideas, artwork, and scripts, and co-create captivating stories with fellow creators.

Engage and Connect: Users can engage with creators and fellow fans through comments, likes, shares, and discussions, fostering a sense of community and camaraderie.

Challenges and Events: Scriptoria hosts challenges, contests, and events to spark creativity, encourage participation, and showcase talent within the community.

Monetization options for writers: writes will be able to make their stories buyable and the user can pay for them.

Personalized Experience: The platform provides a personalized experience with recommendations based on preferences, customized user profiles, and interactive features to enhance user engagement.

Scriptoria aims to empower creators, foster community engagement, promote diversity and inclusivity, and provide a platform for discovery, collaboration, and storytelling in the world of comics.

2 Functional requirements

CREATE PROFILE:

1)User Registration:

Users shall be able to create a profile on the story website by providing necessary information such as username, email address, and password.

The system shall verify the uniqueness of the username and email address to ensure there are no duplicate entries in the database.

2) User Authentication:

Users shall be able to log in to their account by providing their registered email address/username and password.

The system shall authenticate users based on the provided credentials and grant access to their account upon successful verification.

3) Profile Information:

Users shall have the option to provide additional profile information such as a display name, profile picture, bio, and any other relevant details.

The system shall allow users to update their profile information at any time after the initial registration.

4) Profile Visibility:

The system shall allow users to choose whether their profile is visible to other users on the platform.

Users shall have the option to make their profiles public, visible only to registered users, or completely private based on their preferences.

Story Creation and text editor Interface:

1) Story Creation:

Users shall have the ability to create new stories through an intuitive and user-friendly interface.

The system shall provide a dedicated "Create Story" option accessible from the user's dashboard or profile.

2) Story Metadata

During story creation, users shall be prompted to provide metadata such as title, category/genre, tags, and a brief summary or description of the story. The system shall not restrict the number of words users can input for each metadata field, ensuring flexibility and accommodating detailed descriptions or summaries as per the user's discretion.

3)Rich Text Editor:

The system shall incorporate a robust rich text editor that allows users to compose and format their stories with various text styling options (e.g., bold, italic, underline), headings, lists, and hyperlinks.
Users shall have the ability to upload and embed media content such as images within their stories.

4)Draft Management:

Users shall be able to save their stories as drafts and revisit them later for further editing or completion.
The system shall provide a centralized dashboard or repository where users can manage and organize their draft stories efficiently.

5)Collaborative Editing:

The system shall support collaborative editing features, allowing multiple users to collaborate on a single story in real-time.
Users shall be able to invite collaborators by providing their usernames or email addresses, and collaborators shall have designated permissions for editing or commenting on the story.

6)Preview Mode:

The story creation interface shall include a preview mode that allows users to preview how their story will appear to readers before publishing.
Users shall be able to switch between the editing view and the preview mode seamlessly to review and refine their content.

Reading Interface:

1)Story Presentation:

Stories shall be presented in a visually appealing format that enhances the reading experience.
The system shall support rich text formatting, multimedia integration, and interactive elements to engage readers and enrich the storytelling experience.

2)Navigation Controls:

The reading interface shall include navigation controls such as a table of contents, page numbers, or scroll bars to facilitate easy navigation through long-form content.
Users shall have the ability to jump to specific sections or chapters within a story and bookmark their progress for future reference.

3)Responsive Design:

The reading interface shall be responsive and adaptive, ensuring optimal performance and usability across desktop, tablet, and mobile devices.
Content layout and formatting shall adjust dynamically to accommodate different screen sizes and orientations without sacrificing readability or functionality.

4)Reading Progress Tracking:
The system shall track users' reading progress within each story and display visual indicators to show how much of the story has been read.
Users shall be able to resume reading from where they left off and track their overall reading activity across multiple stories.

Search and Discovery Interface:

1)Search Functionality:
The search interface shall allow users to perform keyword-based searches to discover stories relevant to their interests.
Users shall be able to enter search queries in a dedicated search bar and submit their queries to retrieve matching results.

2)Advanced Search Filters:
The system shall support advanced search filters to enable users to refine their search results based on various criteria such as genre.
Users shall have the option to apply multiple filters simultaneously to narrow down their search results effectively.

3)Featured Content Showcase:
The discovery interface shall feature curated lists or collections of trending, popular, or editor's picks content to highlight notable stories and attract user attention.
Featured content sections shall showcase stories across different genres, themes, or categories to cater to diverse user preferences.

4)User Engagement Metrics:
The system shall track user engagement metrics such as views, likes, comments, and shares for each story and use this data to influence content rankings and recommendations within the discovery interface.
Stories with higher engagement metrics shall be prioritized and featured more prominently to attract user attention.

Community Engagement:

1)Messaging System:
The platform shall include a messaging system that enables users to communicate with each other privately.
Users shall be able to send text-based messages, multimedia files, and emojis through the messaging interface.

2) Real-time Chat:
The messaging system shall support real-time communication, allowing users to engage in instant conversations without delays.
Messages shall be delivered and displayed to recipients promptly, providing a seamless chat experience.

3) Read Receipts:
The messaging system shall support read receipts, indicating when a message has been successfully delivered and read by the recipient.
Users shall be able to see read status indicators for their sent messages, providing transparency and acknowledgment of message reception.

4)Message Search and Filtering:
Users shall have the ability to search for specific messages within their conversation history using keywords or filters.
The messaging interface shall provide advanced search and filtering options to facilitate the retrieval of relevant messages efficiently.

3 External interface requirements

3.1 User interface requirements

1-Login and Registration:

Scriptoria offers a secure registration process, allowing users to create accounts using either their email address or social media accounts. For logging in, users have the option to use their username or email, ensuring flexibility and ease of access. Additionally, Scriptoria provides password recovery mechanisms to help users regain access to their accounts if needed.

2- Profile Management:

Scriptoria's interface enables users to easily manage their profiles. This includes options to edit personal information, uploading profile pictures, and customize settings.
Users can also manage their followers. Profile management ensures a personalized and seamless experience for users.

3- Content Upload and Management:

Scriptoria provides a straightforward process for users to upload and manage their written content. Authors can easily upload their stories directly through the platform. They have the flexibility to categorize their content for better visibility and searchability. Authors can monitor the performance of their content through built-in analytics and engage with readers through comments and messages.

4- Reading Interface:

Seamless reading experience with customizable font sizes, and themes. And not only that, users get to like, comment and share the stories they're reading. These features collectively enhance user engagement and satisfaction, fostering a rich and immersive reading experience on Scriptoria.

5- Search and Discovery Interface:

Scriptoria offers a search tool that helps users find what they're looking for by sorting content based on genres or languages, and they can search for author names. Making it easy to discover stories that match their interests. Scriptoria provides personalized recommendations tailored to each user's preferences. Users can also explore trending and popular stories on the platform, helping them discover new and exciting reads.

3.2 Hardware interface requirements

1- Device Compatibility:

Scriptoria is designed to seamlessly function across an array of hardware devices, encompassing desktop computers, laptops, tablets, and smartphones. Its adaptive interface ensures compatibility with various screen sizes and resolutions, guaranteeing optimal viewing and usability regardless of the device used.

2-Minimum System:

Scriptoria is designed to be accessible across a wide range of devices and configurations, so the hardware requirements are kept minimal. The platform is optimized to run efficiently even on devices with limited processing power and memory, ensuring a smooth and enjoyable experience for all users, regardless of their device specifications.

3.3 Software interface requirements

1-Web Browser:

Scriptoria is compatible with a variety of web browsers, ensuring users can access the platform smoothly from their preferred browser. Whether using Google Chrome, Mozilla Firefox, Safari, Microsoft Edge, or other modern browsers, Wattpad's design ensures a seamless experience, allowing users to read, write, and interact with content effortlessly.

2-Operating System:

Scriptoria is made to work with many operating systems, like Windows, macOS, iOS, and Android. This means people can use Scriptoria on different devices, no matter what system they prefer. By doing this, Scriptoria wants to give everyone a smooth and easy experience, making it simple to use Wattpad on any device.

3.4 Communication interface requirements

1- API Integration:

Scriptoria has the capability to seamlessly connect with external APIs, enabling features like social media sharing and payment processing. The communication interface ensures a secure and efficient exchange of data between Scriptoria and external services, enhancing reliability and performance.

2- Real-Time Communication:
Scriptoria offers a real-time chat feature that allows users to communicate with each other. this includes both private messages and public comments.

3-Notifications:
Users receive notifications for various activities such as when someone they follow posts a new story, or when they receive a new comment or message.

4-Muting and Blocking:
Scriptoria provides a feature to mute or block other users. this can be used to manage communications and interactions with other users.

④ Non-functional requirements

4.1 Security

To ensure robust protection of user data, including login information and credentials, Scriptoria will employ bcrypt (version 5.1.1) encryption within the Node.js environment. This industry-standard encryption method incorporates a salt to safeguard against rainbow table attacks. Additionally, bcrypt is an adaptive function, meaning the iteration count can be adjusted over time to maintain resistance against brute-force search attacks, even as computation power increases.

Bcrypt is a password-hashing function designed by Niels Provos and David Mazières, based on the Blowfish cipher and presented at USENIX in 1999.[1] Besides incorporating a salt to protect against rainbow table attacks, Bcrypt is an adaptive function: over time, the iteration count can be increased to make it slower, so it remains resistant to brute-force search attacks even with increasing computation power.

What is a Bcrypt

Bcrypt documentation

4.2 Capacity

Scriptoria's shared hosting service is expected to handle approximately 1.5–2k visitors per hour, with the capacity to increase through effective website optimization techniques and page size control. With an average page size ranging from 700kb to 1.3mb, shared hosting should efficiently accommodate approximately 7–12k daily visitors. Beyond this threshold, users may experience longer loading times due to increased strain on server resources.

4.3 Compatibility

Database Workload: Scriptoria's system must efficiently handle the anticipated hits on the database, considering factors such as concurrent users and data throughput. Understanding the expected workload will aid in configuring the database infrastructure for optimal performance and scalability.

4.4 Reliability

Reliability refers to consistent performance and availability of the website over time, with minimal disruptions. Scriptoria will ensure reliability through uptime guarantees and responsive support. To maintain reliability, robust infrastructure and practices will be implemented to minimize downtime and swiftly address any issues that arise.

4.5 Scalability

In addition to managing anticipated workload, Scriptoria's system will be designed to scale effectively to accommodate future increases in database traffic or user activity. Techniques such as sharding, or vertical and horizontal scaling will be implemented to distribute the workload and sustain performance as the platform grows.

4.6 Maintainability

The maintainability effort produces and uses a significant amount of information and data. For the sake of achieving a cost-effective, coherent, and comprehensive design, the effective and efficient handling of this information is crucial. Maintainability documentation consists of tasks such as developing maintainability data and feedback reports, establishing and maintaining a maintainability data bank and a library containing important maintainability documents and information.

4.7 Usability

Usability is crucial for providing visitors with a seamless and intuitive browsing experience on Scriptoria. Factors such as ease of navigation, clarity of content, and efficiency of interactive elements will be prioritized. By focusing on usability in design and functionality, Scriptoria aims to enhance user satisfaction, increase engagement, and achieve its goals.

4.8 Other

1- Cross-Browser Compatibility: Scriptoria should be compatible with popular web browsers including Google Chrome, Mozilla Firefox, Apple Safari, and Microsoft Edge.

2- Device Compatibility: The platform should be responsive and adaptable to different devices and screen sizes, including desktops, laptops, tablets, and smartphones.

⑤ Definitions and acronyms

KB	Kilobytes
MB	Megabytes
HIT	A hit is any request to a web server.