Software Requirements Specification (SRS)

For *Personal Portfolio Website*

Version 1.0.3
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1. Introduction

1.1 Purpose

This document defines the software requirements for the *Personal Portfolio Website* developed by **Dipsana Roy**. This SRS outlines the features, behavior, design constraints, and quality attributes of the web application. The document ensures clarity and a structured foundation for future maintenance, scalability, and potential improvements.

1.2 Scope

The *Personal Portfolio Website* is a fully responsive, single-developer web application built using HTML, CSS, and JavaScript. It showcases the developer's professional work, education, digital awareness, and writing portfolio. The website includes dynamic project sections, a contact form integrated with Google Forms, and a visually appealing UI inspired by modern console interfaces.

The system provides:

- A central hub for showcasing projects and experience.
- A means for visitors to contact the developer securely.
- An immersive, animated interface optimized for all devices.
- **New in v1.0.3:** Integration of SoundScript project, dynamic SRS linking via GitHub raw URLs, and portfolio optimization.

1.3 Definitions, Acronyms, and Abbreviations

Term	Definition
HTML	HyperText Markup Language
CSS	Cascading Style Sheets
JS	JavaScript
UI	User Interface
UX	User Experience
SRS	Software Requirements Specification
GitHub CDN	Direct file serving via GitHub URLs

1.4 References

- MDN Web Docs (HTML, CSS, JS): https://developer.mozilla.org/
- Google Forms Integration Guide: https://support.google.com/forms/
- Project GitHub Repository: https://github.com/dipsana/portfolio

1.5 Overview

This document describes system functionality, performance requirements, external interfaces, and other constraints relevant to the *Personal Portfolio Website*.

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2. Overall Description

2.1 Product Perspective

The *Personal Portfolio Website* is an independent system designed with modular architecture. It uses:

- index.html as the base landing page (self-sufficient to operate independently).
- style-global.css and script-global.js for shared styling and scripts.
- Independent modules for *About*, *Work*, and *Contact* sections.
- **New in v1.0.3:** Centralized SRS linking via GitHub raw URLs, removal of local SRS duplication.

All sections interact cohesively to deliver a seamless experience while maintaining **low coupling** and **high cohesion**.

2.2 Product Features

- Responsive Design using clamp() and media queries.
- Animated Home Section with typing effects and gradient headers.
- Moving Backgrounds in Home and Work sections for immersive visual appeal.
- Dynamic Work Section with image sliders, transition effects, and **GitHub raw-linked project SRS**.
- About & Insights Section with educational cards, professional links, and interactive digital awareness summaries.
- Contact Section featuring dark mode styling, regex-based form validation, and Google Forms backend integration.
- Fallback Mechanisms in each module ensuring partial functionality even if global files fail.
- **New in v1.0.3:** SoundScript project integration, optimized asset structure, live documentation linking.

2.3 User Characteristics

Target users include:

- Recruiters or employers viewing projects.

- Collaborators or developers referencing technical work.
- General visitors exploring personal or academic achievements.

Users are expected to have basic browsing knowledge.

2.4 Constraints

- Must work without server-side dependencies (purely frontend).
- Must perform consistently across modern browsers.
- Should load efficiently even on slow networks.
- All assets must remain optimized for web delivery.

2.5 Assumptions and Dependencies

- Users have JavaScript enabled in their browsers.
- Internet connection is required for Google Forms backend and GitHub raw SRS links.
- The design assumes standard device aspect ratios (phones, tablets, laptops, desktops).

3. Specific Requirements

3.1 Functional Requirements

ID	Requirement	Description
FR-1	Homepage Display	Display welcome message, typing animation, and introduction.
FR-2	Project Showcase	Dynamically load project cards with title, description, and image slider.
FR-3	Image Slider Controls	Include next/previous buttons and numbered dots with hover transitions.
FR-4	Dynamic SRS Linking	Enable SRS download via GitHub raw URLs (no local duplication).
FR-5	About Section Content	Show education, work experience, digital awareness, and writings.
FR-6	Read More / Read Less	Expand and collapse long text in digital awareness summaries.
FR-7	Contact Form Submission	Send input data to Google Forms via backend integration.
FR-8	Regex Validation	Validate name, email, and message fields on submission.
FR-9	Theme and Aesthetics	Enable dark mode for contact form, gradient animations, and moving backgrounds.
FR-10	Fallback Handling	Ensure basic section rendering if global JS/CSS fail to load.
FR-11	SoundScript Integration	Display SoundScript project with dedicated slider and live SRS linking.

3.2 Non-Functional Requirements

ID	Category	Description
NFR-1	Performance	Website should load within 2 seconds on average broadband.
NFR-2	Usability	Must remain intuitive and easy to navigate across sections.
NFR-3	Reliability	Essential components must function even under degraded conditions.
NFR-4	Security	Input validation and minimal external dependencies.
NFR-5	Maintainability	Modular structure allows independent updates.
NFR-6	Portability	Compatible with major browsers and devices.
NFR-7	Aesthetic Quality	Maintain consistent theme and animated feedback across UI elements.
NFR-8	Documentation Freshness	SRS links must always point to latest project documentation via GitHub raw.

4. System Design Constraints

- **Frontend-only architecture:** No server or database dependencies.
- **Technology stack:** HTML5, CSS3, JavaScript (Vanilla).
- **External Integration:** Google Forms API for form submissions; GitHub raw URLs for documentation.
- **Hosting:** Compatible with GitHub Pages and static web servers.
- **Asset Strategy:** Local images; remote SRS via GitHub.

5. Appendices

5.1 Future Enhancements

- Add project filtering and search features.
- Implement visitor analytics tracking.
- Integrate light/dark mode toggle for all pages.
- Add multilingual support (starting with English, Hindi, and Bengali).
- Further image and asset optimization.

5.2 Version History

Version	Date	Description
1.0.3	2026-01-05	SoundScript integration, dynamic SRS linking, portfolio optimization
1.0.2	2025-10-08	YouTube demos, 46% asset optimization, bug fixes
1.0.1	2025-10-08	Brand compliance, legal safety, critical fixes
1.0.0	2025-10-07	Initial Base Release with full portfolio features