Software Requirements Specification (SRS)

For *Personal Portfolio Website*

Version 1.0.2
Date: 2025-10-07
Author: Dipsana Roy

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1. Introduction

1.1 Purpose

The purpose of this document is to define 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 aims to showcase 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.

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

1.4 References

- MDN Web Docs (HTML, CSS, JS)
- Google Forms Integration Guide
- Project GitHub Repository *(To be added upon upload)*

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.

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 downloadable 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.

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 under 1 MB combined for optimal performance.

2.5 Assumptions and Dependencies

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

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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	Download Project SRS	Enable download button for specific projects.
FR-5	About Section Content	Show education, work experience, digital awareness, and writings.
FR-6	Read More / Read Less Toggle	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.

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.

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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.
- **Hosting:** Compatible with GitHub Pages and static web servers.

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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).

5.2 Version History

Version	Date	Description
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

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