1. Objective

This document provides an overview of the **core functionalities and workflow** for a SaaS MVP that allows users to upload files, apply basic design tools, and generate structured data outputs. The focus is on ensuring a **streamlined user experience** while maintaining efficient data processing capabilities.

2. Core Functionalities (MVP Scope)

A. File Upload & Image Scaling

- Users upload site images in JPEG, PNG, PDF, or CAD formats.
- Users define a known reference distance to scale the image.

B. Basic Drawing & Annotation Tools

- Users can draw basic elements over the scaled image.
- Simple labeling system to allow users to annotate elements.
- Basic measurement tool to estimate distances.

C. Automated Data Extraction & Calculation

- System processes basic quantities and dimensions based on user input.
- Generates structured data output in a standardized format.

D. User-Defined Data Input & Processing

- Users enter custom input values to generate data-driven outputs.
- System performs basic calculations based on input data.

E. Report Generation & Export

- Generates **structured CSV file** with processed data.
- Option to create PDF version.

3. User Flow

Step 1: File Upload & Scaling

- 1. User uploads an image or file.
- 2. User sets a **reference distance** for scaling.

Step 2: Drawing & Annotation

- 1. User selects basic drawing tools.
- 2. User adds labels to drawn elements.

Step 3: Auto-Processing & Data Generation

- 1. System extracts basic calculated values.
- 2. User inputs additional data as needed.
- 3. System generates **structured data output**.

Step 4: Exporting Data

- 1. User clicks **Export**.
- 2. System generates a structured CSV file or PDF.
- 3. User downloads the file for further use.

4. Deliverables

✓ Functional MVP with file uploads, scaling, and basic annotation tools. ✓ Basic structured data extraction & processing. ✓ CSV export functionality. ✓ Minimal UI to facilitate user interaction. ✓ Backend for handling file storage & processing.