Birthflower Bouquet Generator – Project Briefing

Project Name (important for Upwork)

Recommended project title: **Automatic SVG Bouquet Generator for Engraving (Rule-Based Generative Design)** Alternative title: **Web Tool to Auto-Generate Engraving-Ready SVG Designs from Shopify Orders**

Purpose of this document

This briefing explains in non-technical language what we want to build, what problems it should solve, and what skills the developer must have. The goal is to automate the creation of engraved bouquet designs and printable poster PDFs based on Shopify customer orders.

Project Context

We run a Shopify-based webshop selling personalized birthflower bouquet designs. Customers select between 1 and 5 flowers (out of 12 predefined flowers). Each flower already exists as a clean SVG vector file. The bouquet is engraved on jewelry, and optionally offered as a printable digital poster (upsell).

What This Is NOT

- Not AI image generation (no Midjourney, Stable Diffusion, etc.)
- Not freeform artistic drawing
- Not customer-side design tools

Phase 1 – Bouquet Generator (Most Important)

- Generate a balanced bouquet from 1–5 flowers (duplicates allowed)
- Rule-based / generative layout logic
- Automatic scaling, positioning, and rotation
- Support mirrored and pruned SVG variants
- Minimize awkward overlaps

Phase 2 – Printable Poster Generator

- Generate print-ready A4 PDF posters
- Bouquet remains vector artwork
- Two text inputs from checkout (title + names)
- Fixed fonts, sizes, spacing and alignment
- Fonts embedded, no editable fields required

Automation & Shopify Integration

- Generator triggered automatically after Shopify order
- Receives flowers and text from order properties
- Outputs saved per order

- PDF automatically sent to customer by email

Who We Are Looking For

We are specifically looking for a creative / computational graphics developer, not a generic AI engineer.
- Strong SVG / vector graphics skills
- Experience with rule-based generative design
- Backend or web development (Node.js or Python)
- Understanding of print, laser, or engraving workflows

Skill-Set Checklist

- SVG manipulation (paths, transforms, viewBox)
- Programmatic layout / generative design
- Node.js or Python
- Export to print / laser / engraving formats
- Basic geometry / collision handling
- Experience with Illustrator / CNC / laser tools (nice to have)
- Shopify order workflows or webhooks (bonus)

Typical Job Titles That Fit This Project

- Generative Design Developer
- SVG Automation Specialist
- Creative Coder
- Computational Designer
- Laser / CNC / Engraving Software Developer