

Request for Proposal (RFP)

Title: Development of Custom Suit Business Automation Platform

Date Issued: 9/24/2024

Proposal Due Date: 10/01/2024

Contact Information:

Uomo Migliore

Custom Men/Women Duo Company

1. Introduction

[Your Company Name] is a luxury custom men/women duo business that operates primarily online, with post-production alterations done in person. We are seeking proposals from experienced developers or development firms to design, build, and deploy a platform that automates our business processes. The platform should include capabilities for customers to take their measurements using their phone cameras, browse and select fabrics, manage profiles, handle invoicing, and more.

2. Project Overview

The goal of this project is to create a user-friendly, efficient, and secure platform that allows our customers to interact with our business seamlessly from any device. The platform should provide an all-inclusive experience, from taking measurements to browsing fabrics and managing orders.

3. Scope of Work

The selected developer will be responsible for:

- Platform Design & Development:
- Measurement Tool Integration: Implement a tool that allows customers to take their body measurements using their phone camera with at least 97% accuracy. The tool should leverage open-source trained modules for pose estimation, such as:
 - MediaPipe by Google: Offers high-accuracy pose estimation and can be integrated with TensorFlow for additional customization.
 - OpenPose by Carnegie Mellon: Supports real-time multi-person keypoint detection and can be adapted to extract body measurements.
 - DensePose by Facebook AI Research: Provides detailed body mapping, useful for precise measurements.

- Human Pose Estimation (HPE) by Intel OpenVINO: Optimized for edge devices with pretrained models for 2D and 3D human pose estimation.
- TensorFlow.js PoseNet: A lightweight model that can run directly in the browser for customer-facing applications.
- DeepLabCut: A customizable Python package for pose estimation, originally designed for animal behavior analysis but adaptable for human use.
- YOLO for Pose Estimation: Known for speed and accuracy, this model can be adapted for pose estimation tasks.
- Fabric Catalog Management: Create a searchable, indexed database of fabric images and descriptions.
- Customer Profile Management: Develop a robust customer profile system that stores measurement data, order history, preferences, and other relevant information.
- Order Processing & Invoicing: Implement an automated system for order processing, invoicing, and payment tracking.
- User Interface & Experience: Design an intuitive, aesthetically pleasing, and responsive UI/UX for both desktop and mobile users.
- Security: Ensure the platform adheres to the highest security standards, including data encryption, secure authentication, and regular security audits.
- Backend Development: Build a scalable and maintainable backend that supports all functionalities, including database management, API integration, and server management.
- Third-Party Integrations: Integrate with necessary third-party services, such as payment gateways, email services, and CRM tools.

4. Technical Requirements

- Technology Stack:
- Frontend: Modern web technologies (e.g., React.js, Vue.js, Angular) with responsive design.
- Backend: Robust backend framework (e.g., Node.js, Django, Ruby on Rails) with RESTful API support.
- Database: Scalable database solutions (e.g., PostgreSQL, MySQL, MongoDB) for customer profiles and fabric catalog management.
- Security: Implementation of secure protocols (e.g., HTTPS, OAuth, JWT) and compliance with GDPR and other relevant regulations.
- Deployment: Cloud-based deployment on platforms such as AWS, Google Cloud, or Azure.
- Version Control: Use of version control systems like Git for project tracking and collaboration.

5. Proposal Submission Requirements

Proposals should include:

- Company Information: Brief overview of the company, including experience, team size, and relevant projects.
- Technical Approach: Detailed explanation of the proposed solution, including the technology stack, development process, and timeline.
- Project Plan: Milestones, deliverables, and estimated timeframes for completion.
- Cost Estimate: Comprehensive budget covering development, testing, deployment, and maintenance.
- References: At least three references from past clients with similar projects.
- Support & Maintenance: Outline of post-launch support, including updates, bug fixes, and technical support.

6. Evaluation Criteria

Proposals will be evaluated based on:

- Technical Expertise: Demonstrated experience in building similar platforms and proficiency in the required technologies.
- Creativity & Innovation: Ability to propose creative solutions that enhance the user experience.
- Cost & Timeline: Competitive pricing and realistic project timelines.
- References & Reputation: Positive feedback from past clients and a strong track record of successful projects.
- Support & Maintenance: Quality of post-launch support and commitment to ongoing improvement.