1. Introduction

Tapestry is seeking proposals from qualified vendors to develop a simple web-based calculator application that will perform basic arithmetic operations. The goal of this project is to create a user-friendly interface where users can input two numbers and select an arithmetic operation (addition, subtraction, multiplication, or division). The application should return the correct result for the operation, with appropriate error handling for cases like division by zero.

2. Project Overview

2.1 Purpose

The purpose of this project is to provide Tapestry with a basic web-based calculator that can be easily integrated into other systems through a REST API. The application will serve as a tool for end-users to perform basic calculations online.

2.2 Objectives

- Develop a web application that performs addition, subtraction, multiplication, and division.
- Ensure the application can handle edge cases such as division by zero.
- Provide a simple and clean user interface.
- Deliver the application as a REST API for ease of integration.
- Deploy the application on Azure, with guidance provided to Tapestry's internal team.

3. Scope of Work

3.1 Functional Requirements

- **Addition Operation:** The application will provide an endpoint to add two numbers.
- **Subtraction Operation:** The application will provide an endpoint to subtract one number from another.
- **Multiplication Operation:** The application will provide an endpoint to multiply two numbers.
- **Division Operation:** The application will provide an endpoint to divide one number by another, with error handling for division by zero.

- **Error Handling:** Implement robust error handling, particularly for cases such as division by zero, returning clear and descriptive error messages.
- **Input Validation:** Ensure that only valid numerical inputs are accepted.

3.2 Non-Functional Requirements

- **Usability:** The application should have a simple and intuitive user interface.
- **Performance:** The application should process requests and return results promptly, within a reasonable time frame.
- **Security:** Ensure that the application follows best practices in web security to protect against common vulnerabilities.
- **Scalability:** The application should be scalable to handle a growing number of users without significant degradation in performance.

3.3 Deliverables

- A fully functional web-based calculator application.
- Documentation for API usage and integration.
- User guide for the application.
- Deployment guide, including steps for deploying on Azure.
- Support for initial deployment and configuration on Azure.

4. Technical Requirements

4.1 Technology Stack

- **Programming Language:** Python
- **Framework:** Flask
- **API Format:** RESTful
- **Deployment:** Azure
- **Server:** WSGI server (e.g., Gunicorn) for production deployment
- **Containerization:** Docker (if required by the client)

4.2 Integration Requirements

- The application should expose a REST API with endpoints for each arithmetic operation.
- The API should return results in JSON format.

5. Project Timeline

The project is expected to be completed within 6 weeks from the date of contract signing. Below is a high-level timeline:

Milestone	Timeline
Project Kickoff	Week 1
Requirements Finalization	Week 1
Development Phase	Week 2-4
Testing and Quality Assurance	Week 5
Deployment on Azure	Week 6
Final Review and Acceptance	Week 6

6. Budget

The budget for this project will be determined based on the proposals received. Please provide a detailed cost breakdown, including:

- Development costs
- Testing and QA costs
- Deployment assistance costs
- Any other costs associated with the project

7. Proposal Submission Guidelines

7.1 Submission Deadline

Proposals must be submitted no later than September 15, 2024.

7.2 Proposal Format

Proposals should include the following sections:

- Executive Summary
- Detailed Scope of Work
- Project Timeline
- Budget Breakdown
- Vendor's Experience and Qualifications
- References from Previous Clients
- Proposed Team and Roles

7.3 Evaluation Criteria

Proposals will be evaluated based on the following criteria:

- Understanding of the project requirements
- Experience and expertise in similar projects
- Proposed timeline and ability to meet deadlines
- Cost-effectiveness
- Quality of references and past performance

8. Contact Information

For any queries related to this RFP, please contact:

Jane Doe
Project Manager, Tapestry
Email: janedoe@tapestry.com
Phone: +1 555-123-4567

Note: Tapestry reserves the right to reject any or all proposals, to waive any informality or irregularity in any proposal received, and to accept any proposal deemed to be in the best interest of Tapestry.

End of RFP