Feasibility Proposal

For
AI-Powered Personal Profile Hosting on Azure

Prepared for ***Sesame Group***

By ***SithCloud***

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I. Executive Summary

This proposal presents a scalable and secure AI-driven personal profile hosting platform. The service enables professionals from any industry to create a personalized public profile card style page containing their photo, short personal summary, social media links, and equipped with an AI assistant capable of answering visitors' questions about them on any topic they choose to train their AI with. It also enables visitors to conduct AI powered searches to find individuals who can provide the services they need.
Hosted on Microsoft Azure, the solution emphasizes security, scalability, and seamless user experience.

Key points include:
- **Affordable and sustainable development within S$7,000 ~ S$10,000.**
- **Integration of Azure services and Stripe payment gateway.**
- **Delivering a high-quality MVP within a five-week timeline.**

II. Background and Problem Statement

Modern professionals need interactive, dynamic profiles to showcase their achievements. Static websites are costly and outdated, while social platforms lack customizability.

Challenges Identified:
- Limited online interactivity for personal branding.
- High cost and complexity of personal website development.
- Missed opportunities to engage with potential clients/employers due to possible overwhelming supply & demand, and time constraints.

The solution is a scalable, cloud-based service acting as a clean, minimal profile card system with an embedded or linked AI Assistant support to revolutionize professional self-presentation.

III. Proposed Solutions

1. Development of AI-Enhanced Profile Pages

- Flask-based backend with HTML/CSS frontend.
- Individual URLs.

2. Cloud Infrastructure on Microsoft Azure

- Azure App Service for hosting: high scalability, and high availability.
- Azure SQL Database for user and profile data. Depending on service tier, can be an inexpensive solution.
- Azure Blob Storage for profile images.
- Azure Monitor for application health tracking. Provides real-time insights into the application's performance, usage trends, and error logs. It helps proactively identify and resolve issues, enabling better uptime and performance monitoring.

3. Payment and Subscription Management

- Stripe integration to manage monthly and annual subscriptions, with availability of add-ons.
- Automated subscription validation.

4. AI Assistant Integration

- Upload of PDF/TXT files through Sesame Group's Admin UI, with AI assistant's setup.
- API calls. Our application will poll Sesame Group's API to check for Ai assistant's readiness, then will link/embed it.

5. Profile Management Portal

- Dashboard for web app users. Will show 5 sections: User Account (personal details), Profile Card (photo, editable or AI-generated summary, social media & email icons), AI Assistant (linked to Sesame Group's Admin UI), Password Management, and Help

IV. Implementation Plan

Stakeholders

- Sesame Group: Business owner and Stripe account holder
- SithCloud's Web Development Team
- Azure Administrator to be designated by Sesame Group
- SithCloud's UI/UX Designer
- SithCloud's QA Testing Team collaborating with Sesame Group's QA Testing Team

Timeline

Phase 1: Setup and User System (Week 1)

- Environment setup (Azure App Service, Azure SQL)
- User registration/login system development

Phase 2: Payment and Handle Management (Week2)

- Stripe subscription integration
- Handle assignment (unique URL creation)

Phase 3: Profile Editing and AI Assistant (Week 3)

- Bio, photo, social media links management
- Upload PDF/TXT for AI Assistant training (Sesame Group's Admin UI)
- Initiate API integration (embedded or linked)

Phase 4: Public Profiles and Admin Panel (Week 4)

- Public Profile Card finalization
- User Dashboard settings panel (editing and maintenance)

Phase 5: Testing and Deployment (Week 5)

- Functional, load, and security testing
- Deployment to live environment
- Final presentation to Sesame Group, and adjustments

V. Cost Analysis

a. CapEx (Capital Expenditure)

Development budget: S$7,000 ~ S$10,000ost.

b. OpEx (Operational Expenditure)

Total Estimated Azure Monthly Cost: ~S$ 40

Service	Estimated Monthly Cost (SGD)
Azure App Service	~ S$18
Azure SQL Database	~ S$7
Azure Blob Storage	~ S$ 0.03 / GB
Azure Monitor	~ S$ 6.60
Azure DNS Zone	~ S$ 1
Bandwidth (5GB)	~ S$ 3

VI. Risk Mitigations

Cost Overruns:
- Strict cost monitoring using Azure Pricing Calculator
- GitHub Actions for cost-effective CI/CD

Security Vulnerabilities:
- WerkZeug security for password protection
- Secure Azure defaults (HTTPS-only access, IP Firewall for SQL)
- input validation for file uploads

Integration Complexity:
- Azure PaaS (SQL database) to minimize operational overhead
- Documented fallback plan for VM-hosted MySQL if needed

Third-Party API Delays:
- Hourly polling, fallback "AI Assistant is training" notice on profile page. Email alerts once it is active

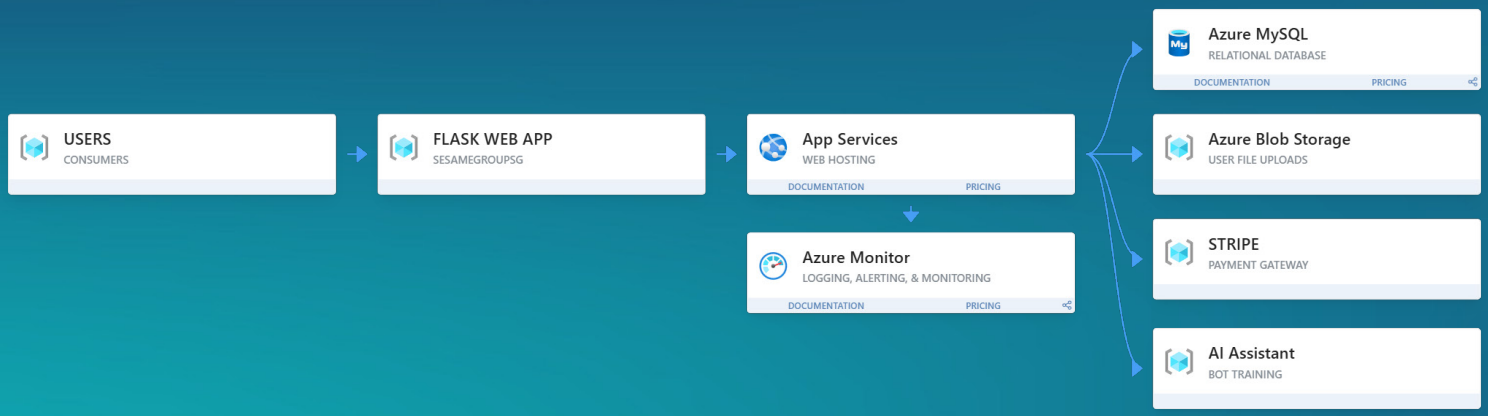
VII. Conclusion & Next Steps

The AI Profile Hosting Platform provides an innovative way for tech professionals to manage their public profiles. With cloud-native architecture, the platform is scalable, secure, and affordable.

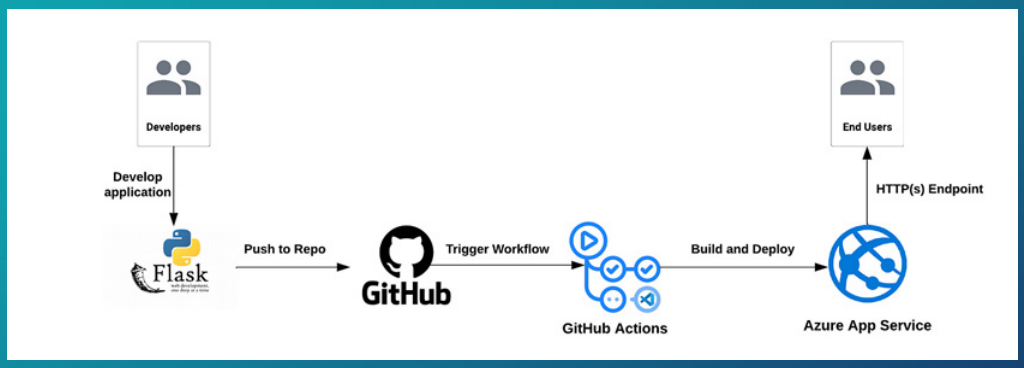
Next Steps:

- Approval of proposal.
- Project kickoff with detailed requirement workshops.
- Initial Azure environment setup.
- Development commencement following outlined phases.

VIII. Technical Diagrams



a. Azure Diagram



b. CI/CD Pipeline Diagram