

Profoliofy — Cost Strategy Document

Overview

This document outlines the cost structure for developing, hosting, deploying, and scaling the Profoliofy platform. It includes free-tier services, open-source tooling, and strategic deployment choices for AI, backend, frontend, and marketing infrastructure. The goal is to maintain a cost-effective yet scalable MVP with realistic future growth provisions.

1. Domain and DNS Management

1.1 Domain Registration

- **Free Option:** .me domain via GitHub Student Developer Pack — Free for 1 year
- **Custom Domain:** .com or .io domains from Namecheap/GoDaddy — \$10–25/year

1.2 DNS Configuration

- **Namecheap DNS** or **Cloudflare DNS** — Free
- Optional performance/security improvements with Cloudflare

2. Frontend Hosting

2.1 Framework

- React (Vite or CRA) or Razor Pages

2.2 Hosting Options

- **GitHub Pages** — Free (for static React SPAs)
- **Vercel / Netlify** — Free tier available; paid tiers from \$19–20/month if advanced features required

3. Backend Hosting (ASP.NET Core)

- **Fly.io** — Free tier available (sufficient for early MVP), paid from \$5–50/month depending on resources
- **Azure App Services** — Free plan (up to 1M compute seconds), scalable to \$20–40/month
- **Railway** — Free for 500 compute hours/month, scalable from \$5/month

4. Database and File Storage

4.1 SQL Database

- **Development:** SQLite or LocalDB — Free
- **Production:**
 - Azure SQL Basic — \$5–10/month
 - PostgreSQL on Fly.io — Free (small apps), scalable from \$5/month
 - Self-hosted SQL on VPS — Included in VPS cost

4.2 File and Image Storage

- **Firebase Storage** — Free 5GB, \$0.026/GB overage
- **Azure Blob Storage** — \$0.02/GB/month
- **Cloudinary** — 25GB Free, scalable from \$25/month (optional)

5. AI Integration Strategy

5.1 API-Based AI (Commercial Providers)

- **OpenAI GPT-3.5:** \$0.002 per 1K tokens (~\$0.005 per user session)
- **GPT-4:** \$0.06–0.10 per 1K tokens (~\$0.20–0.40 per session)

5.2 Self-Hosted Open Source Models

- **Models Supported:** Mistral 7B, Mixtral, LLaMA 3, Phi-2
- **Framework:** Ollama, LM Studio, or Text Generation WebUI

5.3 Deployment Options

- **RunPod Serverless**
 - Auto-suspend GPU on inactivity
 - Cold start latency of 30–90 seconds
 - Estimated monthly cost: \$3–10 based on request volume
- **Vast.ai Spot Instances**
 - Manual start/stop GPU
 - Estimated cost: \$0.10–\$0.20/hour of active inference
- **Google Colab / Hugging Face Spaces**
 - Not recommended for production
 - Suitable for testing/demonstration
- **Local Inference (Ollama)**
 - Free, suitable for local dev/testing

5.4 Final AI Strategy

- MVP phase will leverage RunPod or Vast.ai for low-cost, on-demand GPU inference.
- Transition to fine-tuned models using quantized versions for reduced memory and compute requirements.

6. Email Services

- **SendGrid:** Free (100 emails/day), scalable to \$15/month (Essentials)
- **Mailgun:** Free (5,000 emails/month for 30 days), then \$35/month

7. Analytics and Monitoring

- **Google Analytics:** Free
- **Plausible / Umami (Open-source):**
 - Free for self-hosted
 - Paid cloud hosting from \$9/month

8. Marketing and User Acquisition

8.1 Offline Promotion

- Flyers and printed material — Rs. 1,000–2,000 (one-time)
- Department visits and campus outreach — Free via university networks
- Premium feature giveaways — Free (digital only)

8.2 Social Media Content

- Canva and CapCut — Free tier sufficient for MVP
- Canva Pro — Rs. 1,000/month (optional)
- Social media scheduling tools (e.g., Buffer) — Free tier, scalable to \$15/month

8.3 Paid Advertising

- Meta (Instagram/Facebook) Ads — Rs. 9,000 (~\$30) one-time campaign
- Optional retargeting ads — Rs. 1,000–2,000

9. Template Design

9.1 In-House Development

- Developed using React + Tailwind CSS or Razor Views
- 3–5 templates for MVP
- Estimated time per template: 6–10 hours
- Tools used: Figma (free), existing UI kits, and design systems

9.2 Advantages

- Zero licensing cost
- Full branding control
- Customization-ready components for AI integration

10. Summary of Monthly Operating Costs

Area	Free Option Available	Paid Cost Estimate
Domain + DNS	Yes	\$10–25/year (.com)
Frontend Hosting	Yes	\$0–20/month
Backend Hosting	Yes	\$5–20/month
SQL Database	Yes	\$5–10/month
File Storage	Yes	\$0–5/month
AI Inference (self-hosted)	Yes	\$3–10/month
Email Service	Yes	\$0–15/month
Analytics	Yes	\$0–9/month (optional)
Social Media Tools	Yes	Rs. 1,000/month optional
Paid Advertising	No	Rs. 9,000 (one-time)
Template Design	Yes (in-house)	Time-only

Conclusion

Profoliofy's MVP can be developed and launched with a monthly operating cost of approximately **\$25–50**, if self-hosted AI inference is utilized efficiently.

Leveraging free tools, GitHub Student Pack benefits, and in-house resources, the platform is well-positioned to scale in a cost-effective and modular fashion. AI costs will remain manageable through strategic deployment on serverless GPU platforms with auto-suspend capabilities. This document serves as both a budgeting guide and an infrastructure planning reference.