**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.