BACKEND DEVELOPMENT

1. Authentication & User Management — In Progress

Status: Core implemented, security hardening ongoing
Completed:

- Custom Django user model with **Admin, Provider, Customer** roles
- Functional **login & registration APIs** using DRF

Pending:

- Email verification workflow
- Profile image upload handling
- Advanced password recovery & security flows

Learn / Reference

- Django Custom User Model (Production-Ready)
  https://www.youtube.com/watch?v=HshbjK1vDtY
- DRF Authentication & Permissions
  https://www.youtube.com/watch?v=Fhcn2qx-4VQ

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2. Service Requests & Bidding System — In Development

Status: Data layer complete, business logic in progress
Completed:

- APIs for creating and listing service requests
- Initial `Bid` model for provider quotations

Pending:

- Automated provider matching based on category
- Bid acceptance flow to trigger job creation

Learn / Reference

- Django Marketplace / Bidding System Design
  https://www.youtube.com/results?search_query=django+marketplace+project
- Django Model Relationships & Workflow Logic
  https://www.youtube.com/watch?v=Yz4o0y7E9fY

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3. Financial & Invoicing System — Prototype Stage

Status: Planning & validation phase
Completed:

- Database schemas for **Invoices** and **Payments**
- Manual payment-marking scripts under testing

Pending:

- Automatic invoice generation on job completion
- Platform commission & tax calculation logic

Learn / Reference

- Django Invoice & Billing Systems
  https://www.youtube.com/results?search_query=django+invoice+system
- Financial Calculations in Django Models
  https://www.youtube.com/watch?v=0sMtoedWaf0

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4. Real-time Notifications & Middleware — Setup Phase

Status: Foundation ready
Completed:

- Django Channels installed and configured
- Token-based WebSocket middleware drafted

Pending:

- WebSocket consumers for live bids & job updates
- Event-based notification triggers

Learn / Reference

- Django Channels & WebSockets (Complete Guide)
  https://www.youtube.com/watch?v=R4-XRK6kHjA
- Secure WebSocket Authentication
  https://www.youtube.com/results?search_query=django+channels+authentication

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5. System Logs & Auditing — Draft Phase

Status: Internal validation
Completed:

- Audit log table capturing critical user actions

Pending:

- Admin-facing audit log dashboard
- Automated log retention & cleanup strategy

Learn / Reference

- Django Audit Logging with Signals
  https://www.youtube.com/results?search_query=django+audit+logs
- Django Middleware & Signals Explained
  https://www.youtube.com/watch?v=O6VvZb4RZ0g

Backend Technology Stack (Stage 1–2)

Task	Technology
API Layer	Django Rest Framework (DRF)
User Roles	Custom `AbstractUser`
Database	SQLite (Development)
Document Parsing	python-docx (Exploratory)
Real-time Base	Django Channels

FRONTEND DEVELOPMENT

1. Landing Page & Design System — 60% Done

Status: Structural UI complete
Completed:

- `PublicNavbar`, `PublicFooter`, landing layout
- Custom CSS system and typography

Pending:

- `Hero3D` animation finalization
- Full mobile responsiveness testing

Learn / Reference

- React Landing Page Architecture
  https://www.youtube.com/watch?v=b9eMGE7QtTk
- Responsive Design Best Practices
  https://www.youtube.com/watch?v=srvUrASNj0s

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2. Authentication & User Onboarding — 70% Done

Status: Functional, feature expansion pending
Completed:

- Login, Register, Forgot Password UIs
- Role-based routing with `ProtectedRoute`

Pending:

- Google/Facebook login
- MFA interface screens

Learn / Reference

- React Authentication Flow (JWT)
  https://www.youtube.com/watch?v=E7QQ2x0KjQ4
- Role-Based Routing in React
  https://www.youtube.com/watch?v=2k8NleFjG7I

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3. Customer & Provider Dashboards — 40% Done

Status: Layout-first approach
Completed:

- Dashboard containers for customers & providers
- Basic “My Requests” and “My Bids” views

Pending:

- Live job tracking map
- Provider earnings analytics

Learn / Reference

- React Dashboard Design Patterns
  https://www.youtube.com/watch?v=0m4gJ3wKZyE
- Charts & Data Visualization in React
  https://www.youtube.com/watch?v=5-ptp9tRApM

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4. Admin Management Interface — 30% Done

Status: Skeleton only
Completed:

- Admin user & request table views
- Settings panel scaffolding

Pending:

- AI analytics dashboards
- Audit log visualization
- Commission management UI

Learn / Reference

- Admin Panel Design in React
  https://www.youtube.com/watch?v=YJPSR9dEQV8
- Secure Admin Dashboards
  https://www.youtube.com/watch?v=VY4vJb0GzYI

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5. Service Browsing & Booking — 50% Done

Status: Core UX working
Completed:

- Browse Requests page
- Multi-step Create Request form

Pending:

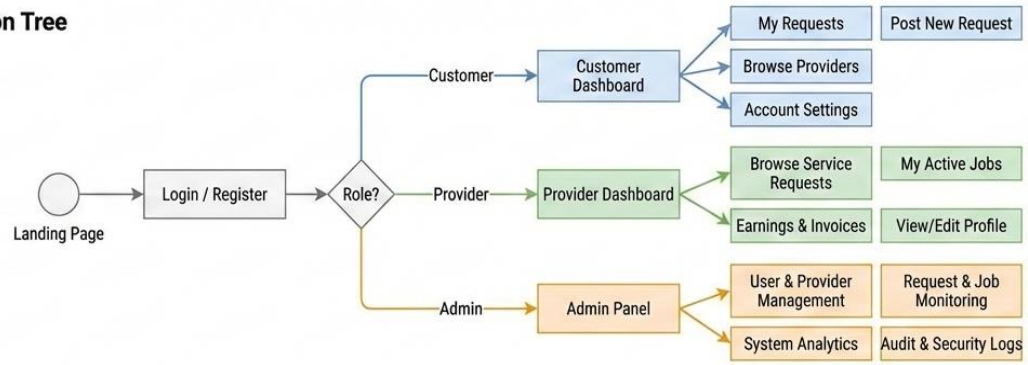
- Real-time bid updates via WebSockets
- Job completion & review flows

Learn / Reference

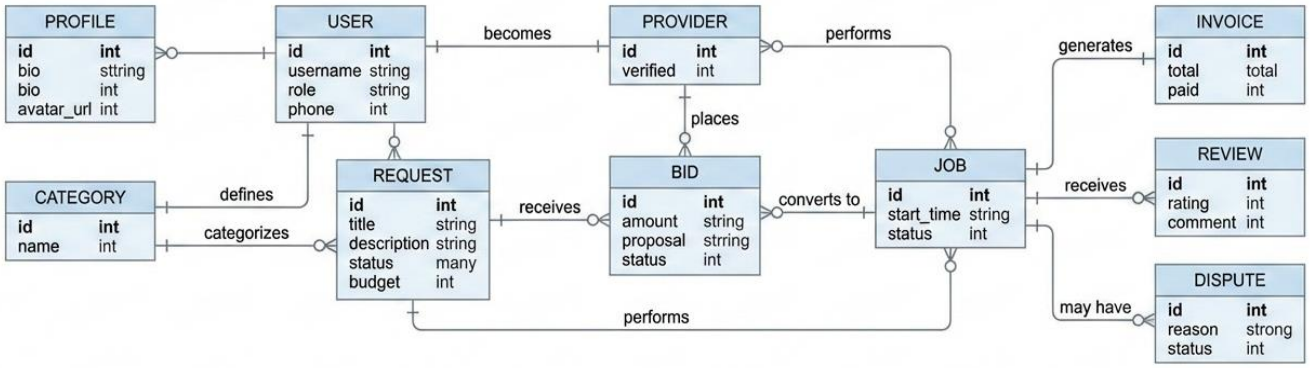
- Real-time UI with WebSockets (React)
  https://www.youtube.com/watch?v=HqX4mP2mE6o
- Multi-step Forms in React
  https://www.youtube.com/watch?v=9B8q8kYz5Hg

DIAGRAMS

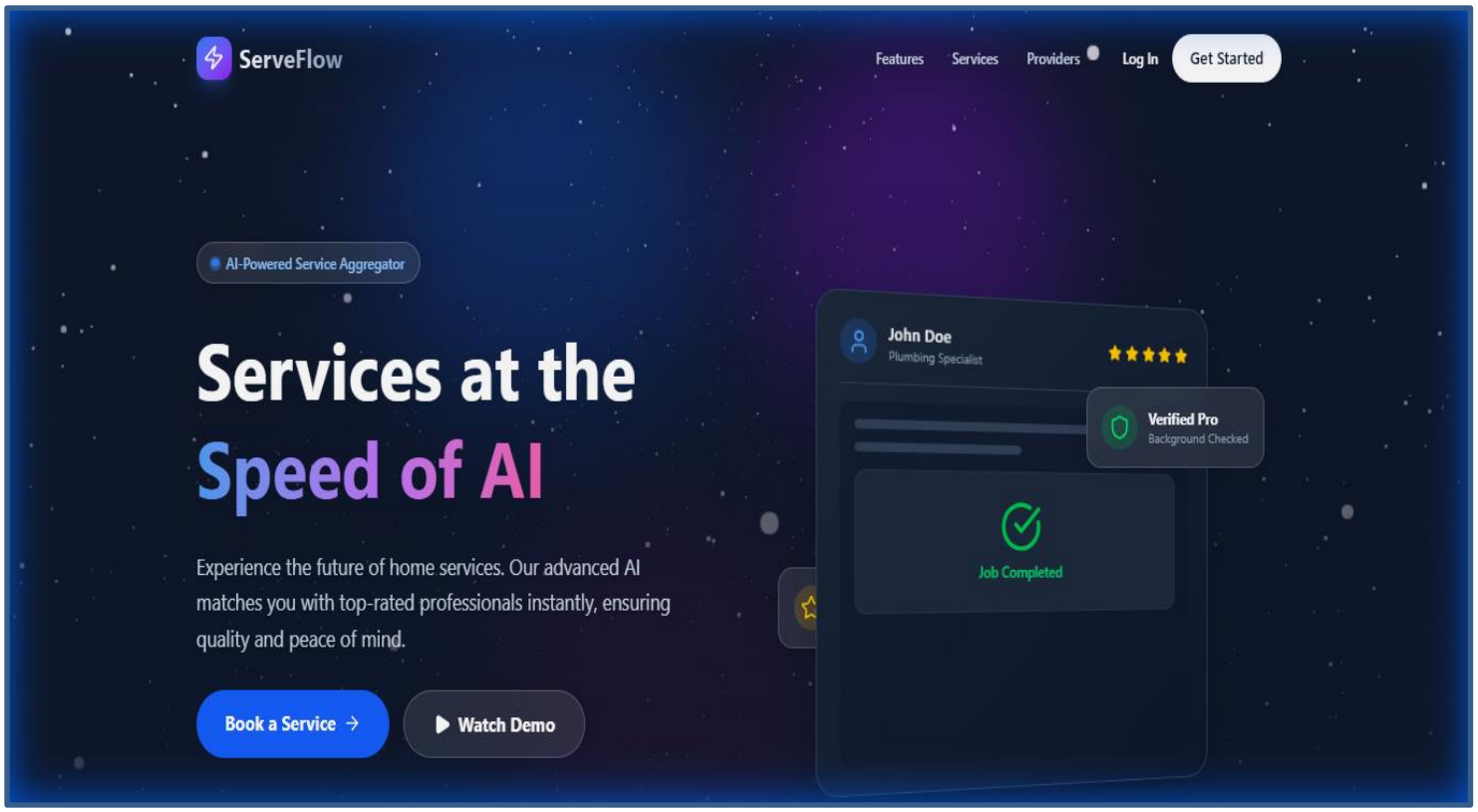
1. User Navigation Tree

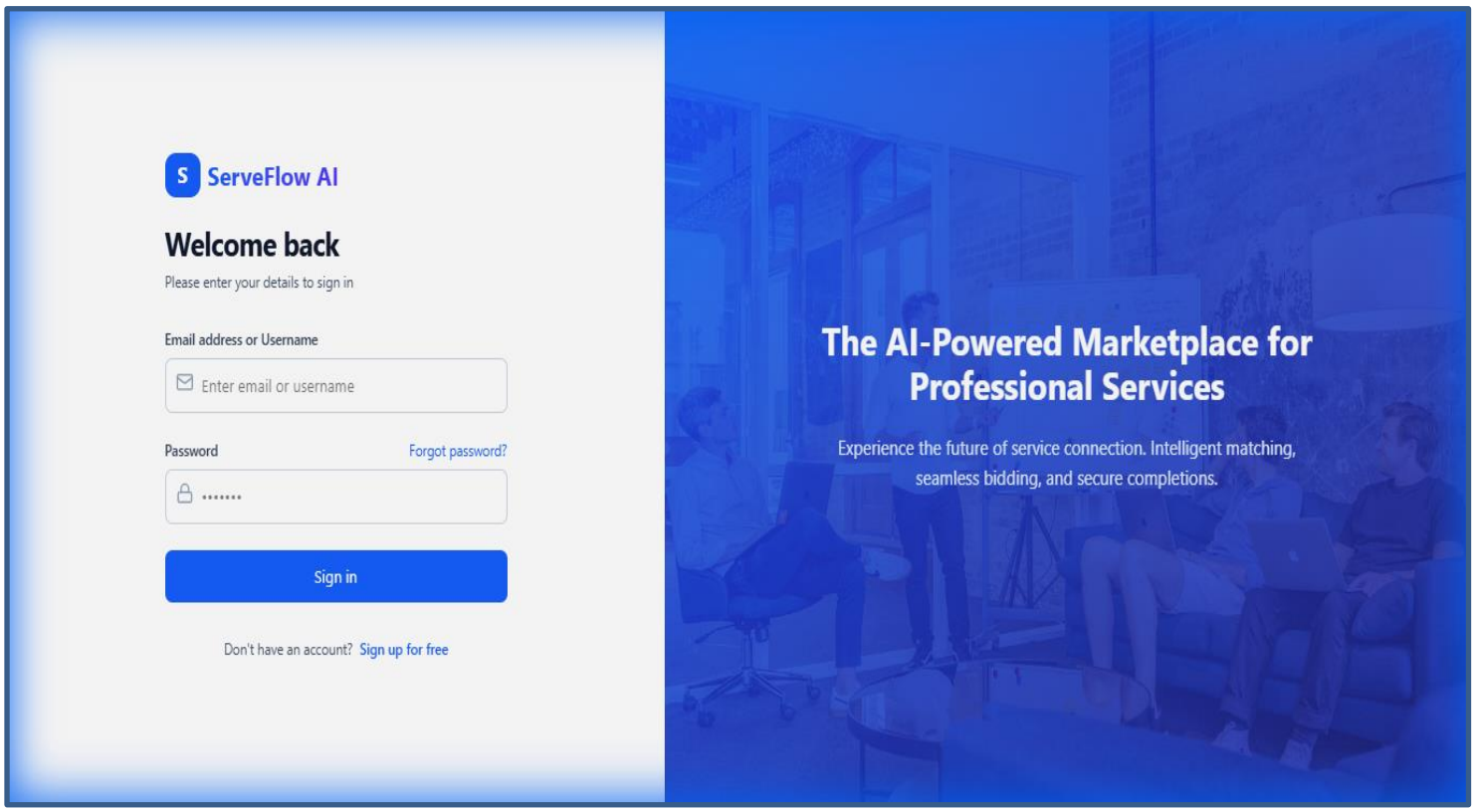


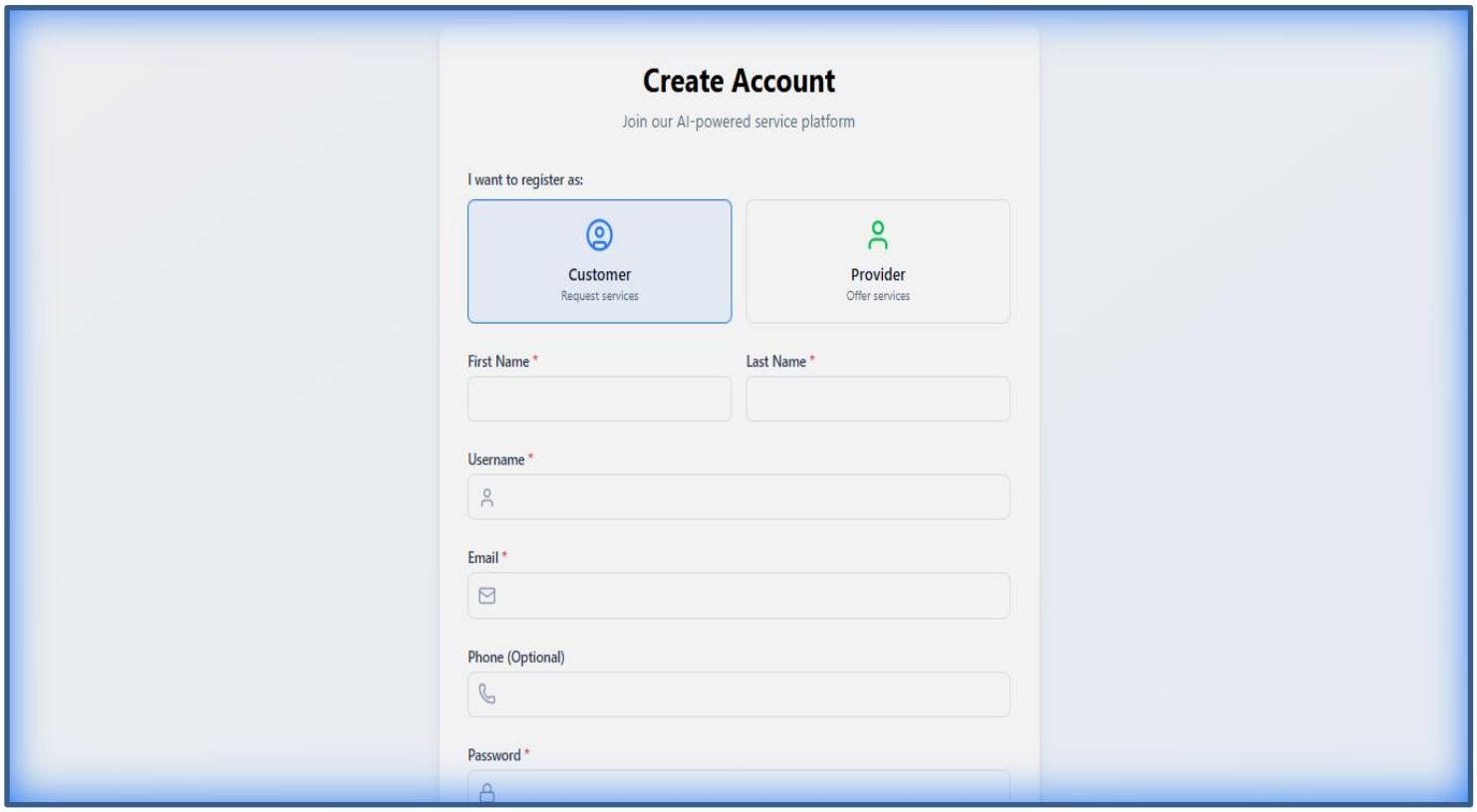
2. Entity Relationship Diagram (ERD) - Prototype

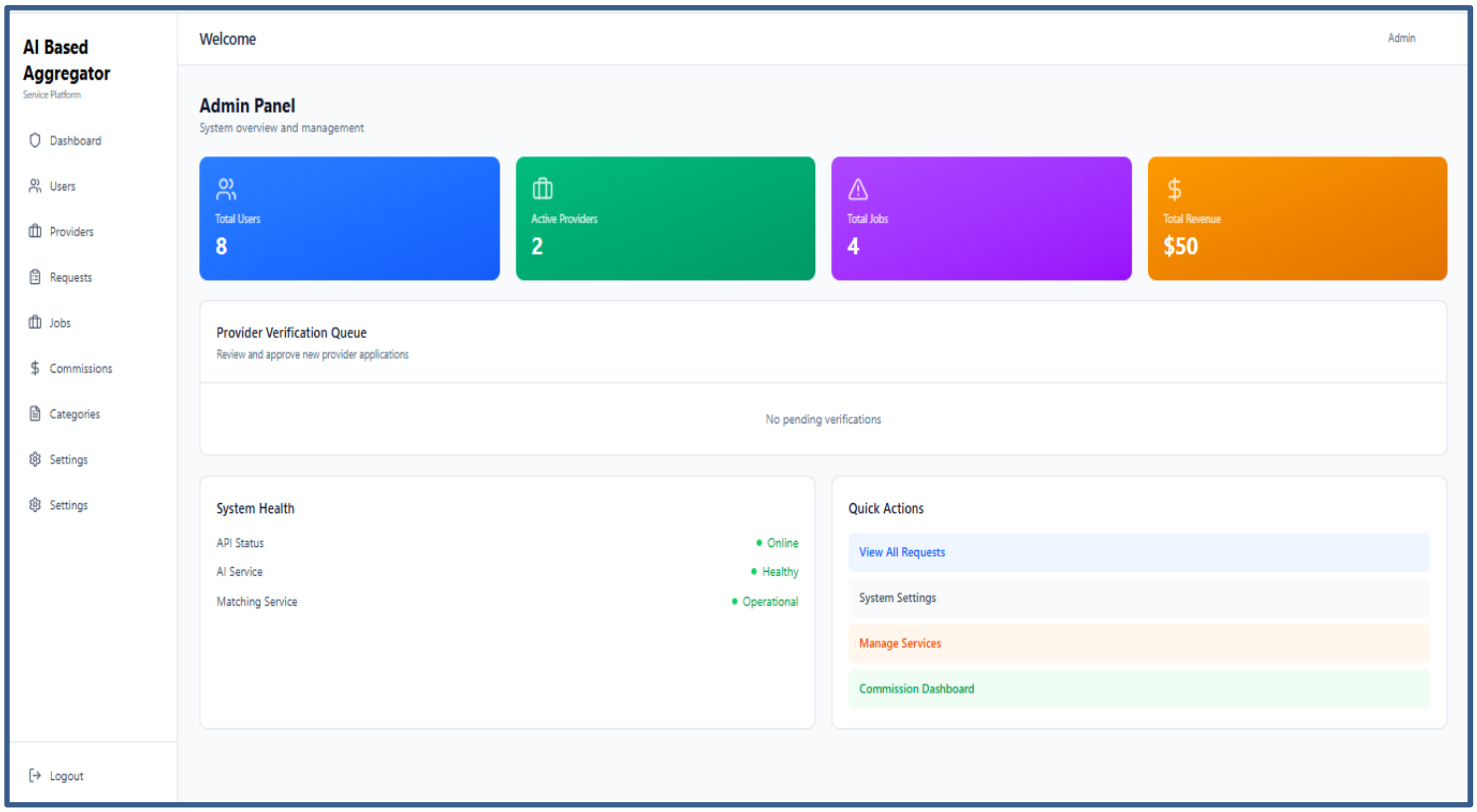


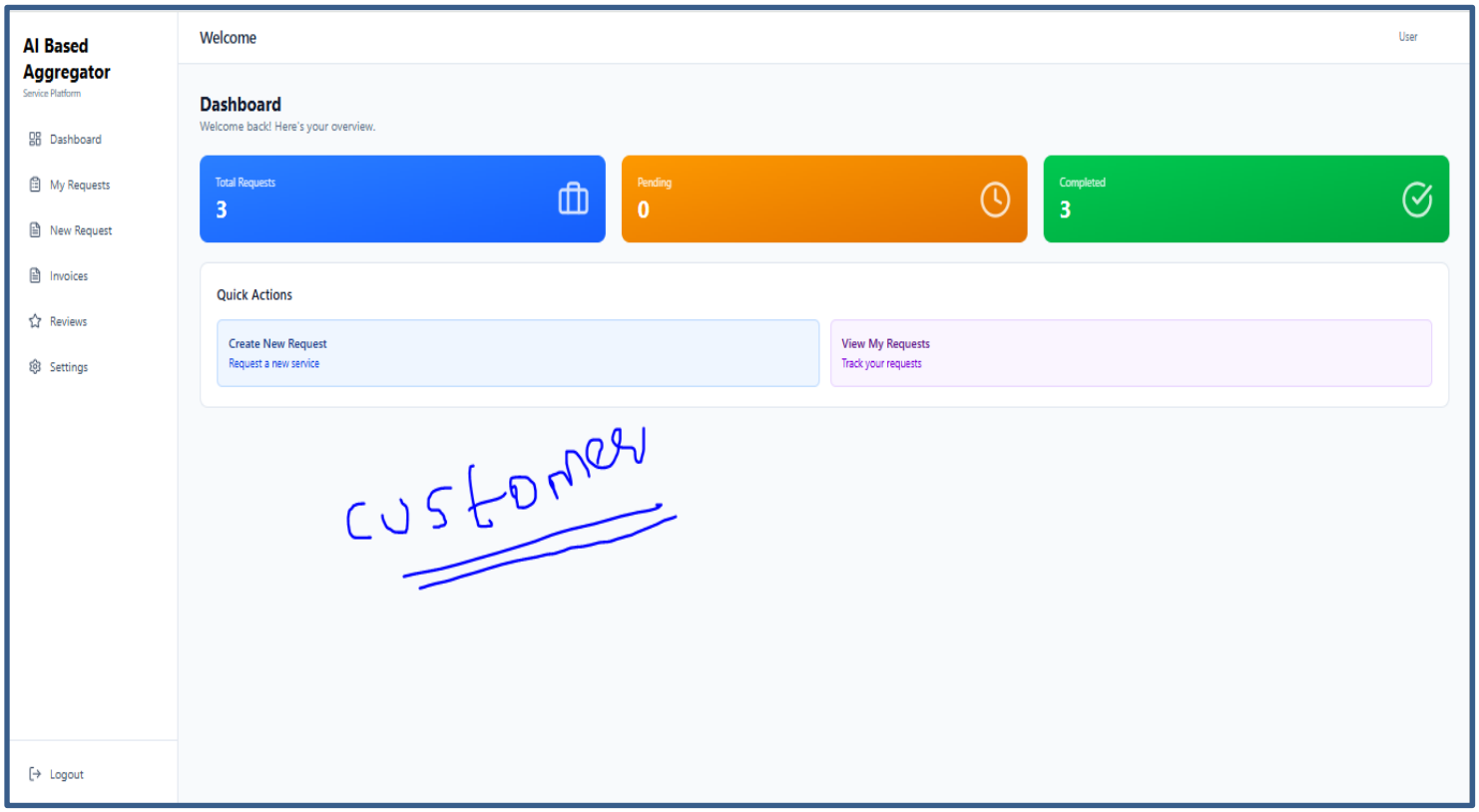
SCREENSHOTS

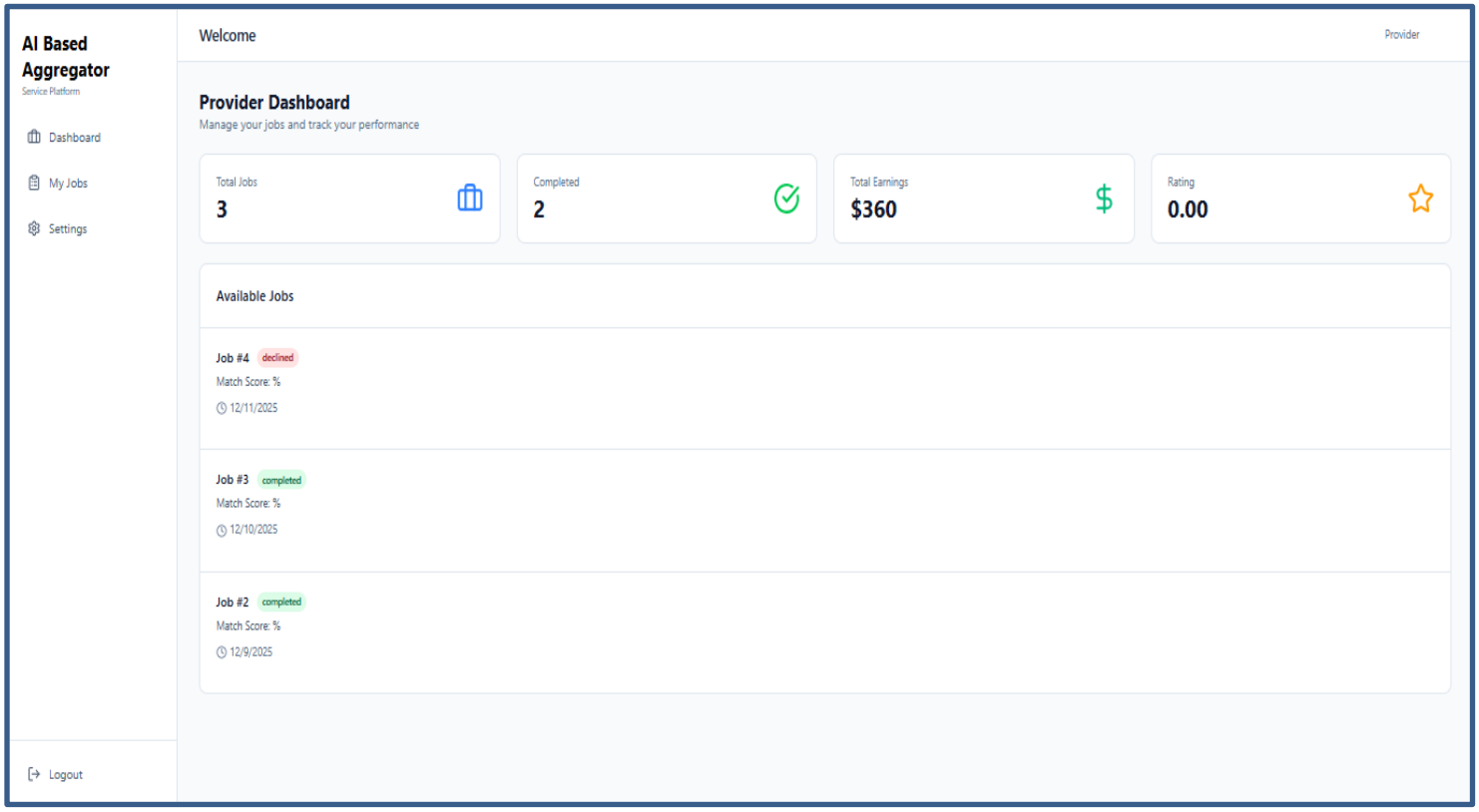





Create Account
Join our AI-powered service platform
I want to register as:
Customer
Request services
Provider
Offer services
First Name *
Last Name *
Username *
Email *
Phone (Optional)
Password *


AI Based Aggregator
Service Platform
Dashboard
Users
Providers
Requests
Jobs
Commissions
Categories
Settings
Settings
Logout
Welcome
Admin
Admin Panel
System overview and management
Total Users
8
Active Providers
2
Total Jobs
4
Total Revenue
$50
Provider Verification Queue
Review and approve new provider applications
No pending verifications
System Health
API Status
Online
AI Service
Healthy
Matching Service
Operational
Quick Actions
View All Requests
System Settings
Manage Services
Commission Dashboard


AI Based Aggregator
Service Platform
Dashboard
My Requests
New Request
Invoices
Reviews
Settings
Logout
Welcome
User
Dashboard
Welcome back! Here's your overview.
Total Requests
3
Pending
0
Completed
3
Quick Actions
Create New Request
Request a new service
View My Requests
Track your requests
customer


AI Based Aggregator
Service Platform
Dashboard
My Jobs
Settings
Logout
Welcome
Provider
Provider Dashboard
Manage your jobs and track your performance
Total Jobs
3
Completed
2
Total Earnings
$360
Rating
0.00
Available Jobs
Job #4 declined
Match Score: %
12/11/2025
Job #3 completed
Match Score: %
12/10/2025
Job #2 completed
Match Score: %
12/9/2025