

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>
-

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>

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>
-

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
-

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>
-

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>
-

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>
-

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>
-

5. Service Browsing & Booking — 50% Done

Status: Core UX working

Completed:

- Browse Requests page
- Multi-step Create Request form

Pending:

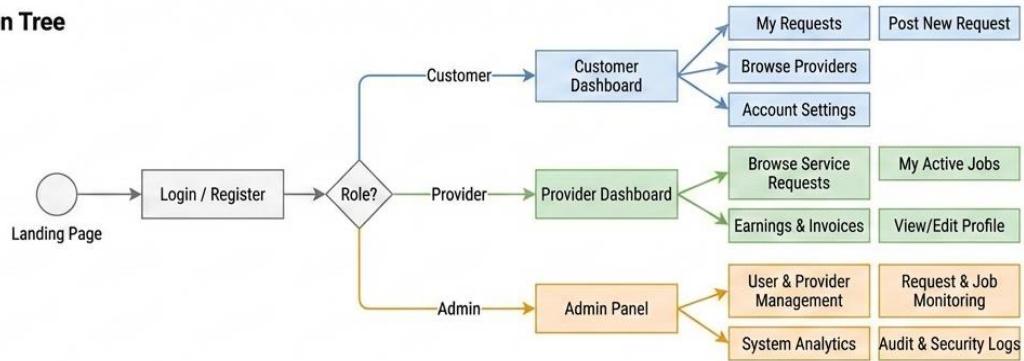
- Real-time bid updates via WebSockets
- Job completion & review flows

Learn / Reference

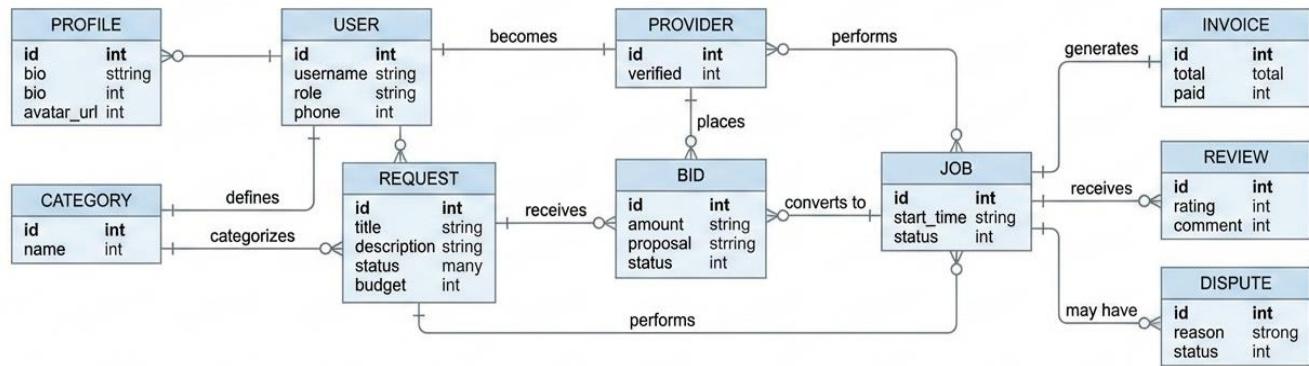
- Real-time UI with WebSockets (React)
<https://www.youtube.com/watch?v=HqX4mP2mE6o>
 - Multi-step Forms in React
<https://www.youtube.com/watch?v=9B8q8kYz5Hg>
-

DIAGRAMS

1. User Navigation Tree



2. Entity Relationship Diagram (ERD) - Prototype



SCREENSHOTS

The screenshot shows the homepage of the ServeFlow AI website. At the top, there's a navigation bar with the logo "ServeFlow" and links for "Features", "Services", "Providers", "Log In", and "Get Started". Below the header, a banner features the text "AI-Powered Service Aggregator" and a large, bold title "Services at the Speed of AI". A subtext below the title reads: "Experience the future of home services. Our advanced AI matches you with top-rated professionals instantly, ensuring quality and peace of mind." Two buttons are present: "Book a Service" and "Watch Demo". To the right, a callout box displays a professional profile for "John Doe" (Plumbing Specialist), showing a 5-star rating, a "Verified Pro" badge (Background Checked), and a "Job Completed" status with a green checkmark icon.

The screenshot shows the sign-in page of the ServeFlow AI website. It features a "Welcome back" message and a "Please enter your details to sign in" placeholder. There are fields for "Email address or Username" and "Password", with a "Forgot password?" link next to the password field. A "Sign in" button is located at the bottom of the form. Below the form, a link says "Don't have an account? Sign up for free". To the right of the sign-in form is a large, semi-transparent promotional image. The image shows several people in a modern office setting, working on laptops and discussing documents. Overlaid on this image is the text "The AI-Powered Marketplace for Professional Services" and a subtitle: "Experience the future of service connection. Intelligent matching, seamless bidding, and secure completions."

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

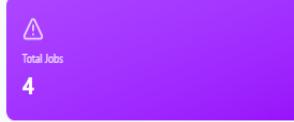
 Settings

Welcome

Admin

Admin Panel

System overview and management



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](#)

 Logout

AI Based Aggregator
Service Platform

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

[Logout](#)

AI Based Aggregator
Service Platform

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

[Logout](#)