

# Software Architecture and Design - Version 0.1

Component	Chosen Technologies	MVC Role
Frontend	React with Next.js, Tailwind CSS, React Query	View
User Management Service	FastAPI, PostgreSQL, python-jose (OAuth2), Redis	Controller (FastAPI), Model (PostgreSQL, Redis)
Scheduling and Matching Service	FastAPI, PostgreSQL, Pandas/NumPy, Celery with Redis	Controller (FastAPI), Model (PostgreSQL, Redis)
Notification Service	FastAPI, PostgreSQL, Amazon SES/SNS, Celery with Redis	Controller (FastAPI), Model (PostgreSQL, Redis)
Messaging and Feedback Service	FastAPI, PostgreSQL, FastAPI WebSockets with Redis Pub/Sub, Celery with Redis	Controller (FastAPI, WebSockets), Model (PostgreSQL, Redis)
Reporting and Analytics Service	FastAPI, PostgreSQL, Pandas/NumPy, Celery with Redis	Controller (FastAPI), Model (PostgreSQL, Redis)
Integration Service	FastAPI, PostgreSQL, google-auth-oauthlib/python-outlook/appl e-pkce/linkedin-api/pandas, Celery with Redis	Controller (FastAPI), Model (PostgreSQL, Redis)

<b>Shared Redis Cache</b>	Redis	Model
<b>API Gateway</b>	Nginx	N/A (Routing Layer)