Tech Stack Documentation

Frontend

Core Framework & Build Tools

- React 18 with TypeScript
- Vite for build tooling and development server
- TypeScript for type safety
- React Router for navigation

UI & Styling

- Tailwind CSS for utility-first styling
- Material UI for core components
- Shadcn UI for enhanced components
- CSS Modules for component-specific styles

State Management

- React Context API for global state
- Custom hooks for local state management
- React Query for server state management

Forms & Validation

- React Hook Form for form management
- Zod for schema validation
- TypeScript for type checking

Backend

Core Framework

- FastAPI for REST API
- Python 3.11+
- Uvicorn as ASGI server

Database & ORM

- PostgreSQL on Railway
- Prisma as ORM
- Database migrations handling

Authentication

- Auth0 for authentication
- JWT token management

- Social login (Google)

AI Integration

- OpenAI API for:
    - Interview simulations
    - Resume analysis
    - Response evaluation
    - Question generation

Infrastructure

Deployment

- Vercel for frontend hosting
- Railway for database hosting
- FastAPI backend deployment on Hetzner/Coolify

Development Tools

- Git for version control
- GitHub for repository
- GitHub Actions for CI/CD
- ESLint & Prettier for code formatting
- Husky for git hooks

Monitoring & Error Tracking

- Sentry for error tracking
- Basic analytics integration
- Performance monitoring

Testing

- Jest for frontend testing
- Pytest for backend testing
- Cypress for E2E testing

Security

- HTTPS enforcement
- Auth0 security features
- API rate limiting
- Input validation
- SQL injection prevention