

# **/exam-saas Project Structure**

## **1. /frontend (Next.js)**

This is your UI layer - what users actually see and interact with.

/frontend

```
/pages          # Next.js routes
  index.js      # Homepage (search bar, trending exams, etc.)
  /api          # Optional Next.js API routes (serverless functions)
/public         # Static assets (images, icons, favicons)
/styles         # Global styles (CSS/Tailwind)
package.json    # Frontend dependencies & scripts
```

Key points:

- TailwindCSS for animations + colors.
- Firebase login integration.
- API calls to FastAPI backend via fetch or axios.

## **2. /backend (FastAPI)**

This is your server logic - AI search, PDF fetching, database communication.

/backend

```
main.py         # FastAPI app entry point
requirements.txt # Python dependencies
firebase_service.py # Firebase integration
ai_services.py  # AI search, GPT API, PDF scraping
```

Key points:

- firebase\_service.py handles authentication and Firestore.
- ai\_services.py handles AI-powered search.
- Host backend on Render, Railway, or Vercel serverless API.

### 3. Root Files

Root-level configuration files:

vercel.json        # Deployment config (routing rules, API rewrites)  
.vercelignore      # Files/folders to skip during deployment  
setup\_instructions.pdf# Setup guide for local development

Example vercel.json:

```
{  
  "rewrites": [  
    { "source": "/api/:path*", "destination": "https://your-backend-host/:path*" }  
  ]  
}
```