GitHub design notes.

```
hplm-core/
├── layers/
│   ├── 1-neural-intake/      # Linguistic Interface (LLM Logic)
│   ├── 2-formalization/      # Natural Language to Math conversion
│   ├── 3-domain-solvers/     # Interfaces for DSS (Fintech, Physics)
│   ├── 4-symbolic-arena/     # Dimensional Analysis & Truth Engine
│   ├── 5-veto-gate/          # Deontic Hard Stops
│   ├── 6-audit-trail/        # TAL Traceback Logic
│   └── 7-deployment/         # Safe Harbor outputs
└── README.md                 # Explains the "Truth Engine" Moat
```

2nd try gemeni audit itself

```
/hplm-core
├── /layers
│   ├── /1-nil-intake         # Neural Intake (LLM Interface)
│   ├── /2-ftl-formalizer     # Formalization (Zod/Token logic)
│   ├── /3-dss-solvers        # Domain Solvers (Math/Logic engines)
│   ├── /4-symbolic-arena     # Truth Engine (Dimensional Analysis)
│   ├── /5-veto-gate          # Deontic Veto (Refusal logic)
│   ├── /6-tal-audit          # Traceback & Audit (Forensic logs)
│   └── /7-adl-deployment     # Safe Harbor (Verified output)
├── /api
│   └── /process              # Main entry point
└── README.md                 # Your HPLM Manifesto
```

Gemeni 3rd try

```
HPLM-Core/ (The Root)
├── app/                <-- This is the Vercel/Next.js "App Router"
│   ├── layout.tsx          # Global site layout
│   ├── page.tsx            # THE FRONTEND (Layer 1 Interface)
│   └── api/
│       └── chat/
│           └── route.ts    # THE BACKEND (Layer 1 Brain)
├── layers/             <-- This is your "Moat" (The Logic)
│   ├── 1-nil-intake/
│   ├── 2-ftl-formalizer/
│   ├── 3-dss-solvers/
│   ├── 4-symbolic-arena/
```

```
│   ├── 5-veto-gate/
│   ├── 6-tal-audit/
│   └── 7-adl-deployment/
├── node_modules/
├── package.json
└── .env.local
```

Gemeni 4th change for uploading files and photos.

```
HPLM-Core/
├── app/
│   ├── api/
│   │   └── chat/route.ts     # Updated to handle images/PDFs
│   └── page.tsx              # Updated with file upload UI
├── layers/
│   ├── 1-nil-intake/
│   │   └── file-parser.ts    # NEW: Logic for OCR and PDF extraction
│   └── 2-ftl-formalizer/
└── public/uploads/           # Temporary storage for audit evidence
```