



```

├──┬──┬── grpc
│   │   └── server.go
│   └── # --- API Gateway Module ---
│       └── gateway
│           ├── handlers
│           │   ├── auth_handler.go
│           │   └── file_handler.go
│           ├── middleware
│           │   └── auth_middleware.go
│           └── routes.go
│
├── migrations
│   ├── auth
│   │   ├── 001_create_users.up.sql
│   │   └── 001_create_users.down.sql
│   └── files
│       ├── 001_file_metadata.up.sql
│       └── 001_file_metadata.down.sql
│
├── pkg
│   ├── constant
│   ├── db
│   │   └── postgres.go
│   ├── errors
│   │   ├── app_error.go
│   │   └── grpc_error.go
│   ├── logger
│   │   └── logger.go
│   ├── pb
│   │   ├── auth
│   │   │   └── auth_grpc.pb.go
│   │   └── files
│   │       └── files_grpc.pb.go
│   └── utils
│
├── .gitignore
├── go.mod
├── go.sum
├── Makefile
└── README.md

```

The REST/HTTP Layer

HTTP endpoints, calls internal gRPC clients

Handles /v1/register, /v1/login

Handles /v1/files/upload

HTTP middleware (CORS, RequestID, JWT validation)

Defines the routing table

5. DATABASE MIGRATIONS (Separated by DB/Service)

Schema for the auth-service DB

Schema for the file-service DB

6. PUBLIC UTILITIES (Shared Libraries)

Shared application constants

Generic DB connection factory (Postgres)

Generic error wrappers/codes

Wrapper around Zap/Logrus

GENERATED GO CODE (The only place contracts are)

Generic non-business tools (hashing, validation)

Automation for proto gen, migrations, build