

# Backend Architecture — File Interactions

This diagram shows how the different backend files interact with each other in the Making Tax Digital SaaS app. Each layer is represented with arrows indicating dependencies.

index.js	Entry point — wires up routes, services, and starts scheduler
routes/	Handles HTTP requests and responses
■■ auth.js	User login/signup + HMRC OAuth2 → calls hmrcApi
■■ files.js	File upload/parse → calls parser + aiCategoriser → stores in DB
■■ transactions.js	CRUD + verification of transactions
■■ submissions.js	Aggregates verified transactions → calls aggregator + hmrcApi
■■ notifications.js	Exposes notifications → uses emailer + scheduler
services/	Core business logic
■■ parser.js	Converts XLSX/CSV buffers → raw rows
■■ aiCategoriser.js	Interprets raw rows with GPT → standardised transactions
■■ aggregator.js	Summarises verified transactions into HMRC payload
■■ hmrcApi.js	Handles token refresh + calls HMRC API
■■ emailer.js	Sends reminders via Nodemailer
■■ scheduler.js	Cron job → checks deadlines → calls emailer
models/	Postgres models (User, Transaction, Submission, Notification, File, HmrcToken)
utils/	Shared helpers (auth middleware, logging, error handling)