Background Service

GET | Result

Third Party API

Save Result

PSQL/SQL Database
- exchange-res
  - id
  - rate
  - from
  - to
  - timestamp

Exchange Rate API
* API Key Authorized

CLOUDFLARE

Client

Design

I would add a recurrent background task to check / fetch fresh exchange data from the 3rd party APIs periodically. I might use Hangfire for it (nice management dashboards) but extending on the BackgroundService class with a cron schedule should be sufficient. This data I would cache in a database of choice (I like PostgreSQL :)) against the timestamp for it. My API can fetch directly from the DB then on request. I would also add auth in an API key and rate limitation (possibly via Cloudflare).