Full-stack engineer take home assignment

1. Create a datastore where following information is stored create the database model according to what you seem to make the most sense. Additional columns can be added if should be needed, information in the provided dataset may be altered if there is a good reason.

name	city	country	latitude	longitude
Office 1	Tallinn	Estonia	59.437042	24.746298
Office 2	Berlin	Germany	52.523592	13.4117733
Office 3	Madrid	Spain	40.415278	-3.703579
Office 4	London	United Kingdom	51.507852	-0.126923
Office 5	Paris	France	48.857018	2.347374
Office 6	Stockholm	Sweden	59.330768	18.056271
Office 7	Rome	Italy	41.897020	12.494369
Office 8	Helsinki	Finland	60.171652	24.938775
Office 9	Amsderdam	Netherlands	52.372301	4.894358
Office 10	Riga	Latvia	56.945816	24.102282

country	timezone
Estonia	GMT+3
Germany	GMT+2
Spain	GMT+1
United Kingdom	GMT+1
France	GMT+2
Sweden	GMT+2
Italy	GMT+2
Finland	GMT+3
Netherlands	GMT+2
Latvia	GMT+3

- 2. Create an API with following capabilities
- User can create a new entry for an office location only if country exists in DB.
- User can create new country

- User can delete an office (except for the ones provided in this task).
- User can remove a country (only if there are no offices in the location).
- User can query all the offices in a country: The response should consist of following items: Office name, city, country, distance, local time

The distance should be calculated from (58.376185, 26.727048) Local time should be the current time in that location.

- 3. Create a simple documentation for the API
- 4. Create a front-end application where the user can select a country from all available countries in DB.

 The FE application should send a request to API and return the response. Upon reiving the response display the result with a clock showing current time at the location.

The UX design is up to you to set up and will not be assessed $\ref{eq:continuous}$