

## We Offer Wellness Report 2

### Project status

I have finished the OLTP Database design. Below, you can find the diagram of its schema.

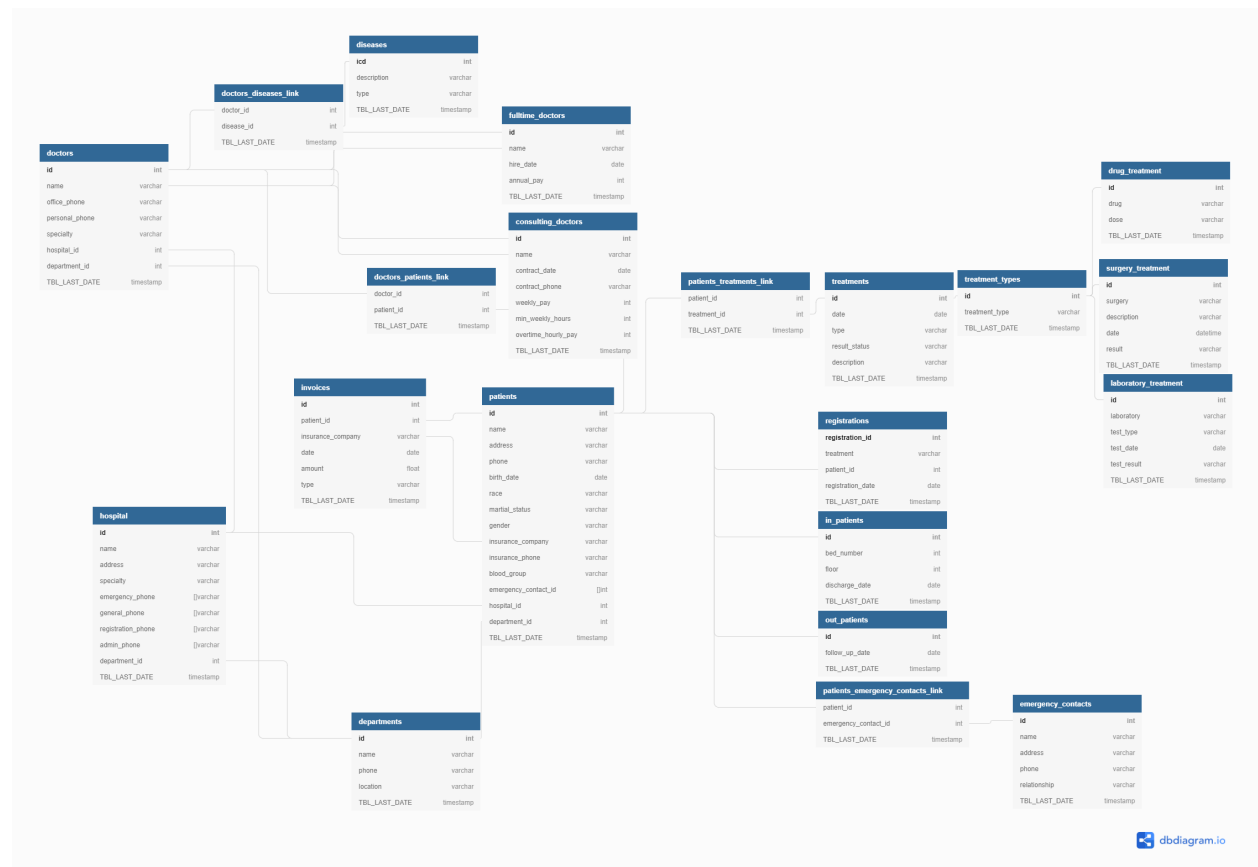


Figure 1: OLTP database design.

I designed the database according to the requirements of the project. For many-to-many relations, I introduced linking tables. The database design is subject to change; I may change some of its parts, while working on the project, if I come across a better approach. All tables, with exception of the linking tables, have primary keys. Each table has a column called TBL\_LAST\_DATE, which is updated with system timestamp via trigger whenever a record is inserted/updated.

## Project progress

Since the previous status report, I have completed the OLTP database design and created a plan with major milestones and due dates for tracking my progress. The project timeline is listed below:

- 9/26/2021: OLTP database design.
- 10/10/2021: OLTP database implementation.
- 10/24/2021: DW design and implementation.
- 11/07/2021: ETL code.
- 11/21/2021: reports and analytics from DW database.
- 12/12/2021: end-to-end tests, project demo.
- 12/14/2021: final project report.
- TBA: final presentation.

In addition to the OLTP database design and the concrete timeline, I have finalized the list of tools that I am going to use in my project:

- DB Layer: PostgreSQL
- Backend: Python (SQLAlchemy + Alembic)
- Architecture:
  - DW: AWS RDS
  - Backend: AWS Elastic Beanstalk

## Project planned work

The next step is building the back-end system and implementing the OLTP database.