

We Offer Wellness Report 5: ETL Code

Project status

Since the last report, I have completed the following tasks:

- Migrated the OLTP database and the DW to my laptop. It was too costly to host it on AWS, regardless of the fact that I chose the minimal settings. To avoid any unexpected charges, I decided to host them locally.
- Extracted from OLTP database based on timestamp (CDC-change data capture)
- Transformed Data to match DW schema

```
hospital
hospital_id    int          PK
department_id  int          PK
name           varchar(50)
address        varchar(50)
specialty      varchar(50)
emergency_phone varchar(50)
registration_phone varchar(50)
admin_phone    varchar(50)
department_name varchar(50)
department_location varchar(50)
```

Figure 1: Hospital entity table in DW.

- Loaded Data to DW schema

	hospital_id [PK] integer	department_id [PK] integer	name character varying (50)	address character varying (50)	specialty character varying (50)	emergency_phone character varying (50)	registration_phone character varying (50)	admin_phone character varying (50)	department_name character varying (50)	department_location character varying (50)
1	1	1	Suspen...	Ap #938-1...	sem	(263) 427-8701	1-889-158-7388	1-289-843-3...	metus	P.O. Box 372, 4583 ...
2	2	2	Lorem L...	623-4164 ...	Etiam	1-422-604-6396	(551) 395-5885	1-225-903-2...	nec,	P.O. Box 526, 8203 ...
3	3	3	Aliquam...	662-8358 ...	risus	(332) 226-1341	1-339-499-6737	1-172-787-1...	fringilla	807-5307 Consecte...
4	4	4	Feugiat ...	838-9961 ...	Class	(597) 226-3566	(570) 621-4305	(226) 835-1...	arcu.	191-1217 Natoque ...
5	5	5	Adipisci...	Ap #669-8...	lobortis	1-777-569-4982	(684) 617-8125	(202) 209-5...	consequat,	Ap #444-2151 Sed ...
6	6	6	Luctus F...	342-4854 ...	sed,	1-722-671-2827	1-130-743-9857	1-417-587-8...	fringilla	765-7353 Velit Aven...
7	7	7	Semper ...	Ap #532-1...	orci,	1-662-223-1059	1-392-917-2938	1-557-724-7...	tellus.	4554 Ut St.
8	8	8	Tempor ...	4857 Pena...	volutpat.	(380) 823-3456	1-335-458-4432	(660) 292-7...	ultrices	Ap #698-8573 Torto...
9	9	9	Semper ...	755-1150 ...	eros.	(735) 667-9201	1-915-153-3866	(675) 652-8...	turpis.	Ap #986-8836 Nam ...
10	10	10	Mauris ...	916-1324 ...	non,	1-155-728-5052	1-654-575-6307	1-779-263-3...	libero	Ap #815-3688 Pede...
11	11	11	Sed Eae...	958-9729 ...	vitae	1-755-512-3015	1-866-432-5145	(315) 304-6...	Aliquam	8230 Tempor Av.

Figure 2: Transformed data for Hospital entity in DW.

Project progress

Below, you can see the timeline of the project. The completed stages of the project are marked with bold font.

- **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.

Project planned work

- reports and analytics from DW database.