Synthea Data in i2b2 Home



Synthetic patient data generated by Synthea can now be loaded into i2b2. The Synthea SyntheticMass sample files have been converted to i2b2-ACT format, and scripts to load Synthea data from scratch are available here: https://github.com/i2b2/i2b2-synthea

Synthea Load Process:

- 1. Set up an i2b2 project with the ACT ontology.
- 2. Either download the SyntheticMass 63k sample in i2b2 format from https://github.com/i2b2/i2b2-synthea/blob/main /syntheamass_63K_sample.zip, or follow the instructions below to load any Synthea dataset from scratch.

Loading Synthea data from scratch

- 1. Download SyntheticMass Data, Version 2 (24 May, 2017)
 - All data sets (1k, COVID 10k, COVID 100k) have been verified to work EXCEPT the 100k patients in the large SyntheticMass Version 2 download.
 - The 100k patients in the large SyntheticMass Version 2 download needs an extra step to delete invalid records before import. In this case, download synthea_cleanup.pl to your disk, and then run "synthea_cleanup <directory-for-synthea-csv-files>" The fixed csv files will be in <directory-for-synthea-csv-files>/fixcsv.2. Set up an i2b2 project with the ACT ontology.
 - Download the scripts from https://github.com/i2b2/i2b2-synthea)
- 2. Run create_synthea_table_<your dbServertype>.sql in your project to create the Synthea tables.
- 3. Import the Synthea data you downloaded in step one into the Synthea tables in your project.
- 4. Load the i2b2-to-SNOMED table in this repository into your project. https://www.nlm.nih.gov/healthit/snomedct/us_edition.html
 - Click on the "Download SNOMED-CT to ICD-10-CM Mapping Resources" link to download. (You will need a UMLS account.)
 - Unzip the file
 - Import the TSV file into a table called SNOMED_to_ICD10 in your database.
- 5. In Postgres and Oracle, follow the additional instructions in the comments at the top of synthea_to_i2b2_<your dbServerType>.sql t o clean up the date formatting.
- 6. Run synthea_to_i2b2_<your dbServertype>.sql to convert synthea data into i2b2 tables (this will truncate your existing fact and dimension tables!)
 - Replace references to i2b2metadata.dbo in the script. Use the database and schema where your ACT ontology tables are.

Recent space activity

Space contributors

Jeffrey Klann (706 days ago)

Jettrey Klann

Synthea Data in i2b2 Home updated Jun 01, 2022 • vie w change