

File Descriptions

Directory: data

This directory has all of the provided *.dat files and the provided, pre-compiled C program which prints out the data pertaining to persons/messages within a **provided range**

File: data.txt

This is the resulting file after running the program (directions documented in the following section titled “Workflow”)

File: dbCredentials.py

This is the file which contains the credentials for the database, it is referenced by the dbLoader.py file

File: parser.py

This is the file which parses the created data.txt file and creates objects (this file is utilized by the dbLoader.py file)

File: dbLoader.py

This is the file which performs builds the objects from the data.txt file (using the parser.py file) and then has its own logic to upload the objects to the database

Workflow

1. Go into data folder: `cd data/`
2. Run this command: `./fileRangeReader 0 1999 > data.txt`
3. Move data.txt upward into the dataParser folder: `mv data.txt ../`
4. Move upward into the dataParser folder: `cd ../`
5. Run dbLoader.py: `python3 dbLoader.py`

Script Architecture

dbLoader.py

- `def main():`
- `def exportData(data):`
- `def exportMessages(connection, cursor, personId, messages):`
- `def exportMessage(connection, cursor, personId, message):`
- `def exportTimestamp(connection, cursor, date, time):`
- `def exportDate(connection, cursor, date):`
- `def exportTime(connection, cursor, time):`
- `def exportPerson(connection, cursor, person):`
- `def exportLocation(connection, cursor, state, city):`
- `def exportState(connection, cursor, name):`
- `def exportCity(connection, cursor, name):`
- `def getDbConnection():`

parser.py

- `def main():`
- `def loadData(filepath):`
- `def _buildMessages(section):`
- `def _convertDateFormat(date):`
- `def _extractValue(line):`
- `def _isTimestamp(number):`
- `def _loadSections(filepath):`
- `def _lineIsIrrelevant(line):`