documentdb

December 13, 2020

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[15]: from pathlib import Path
      import json
      import os

      from tinydb import TinyDB

      current_dir = Path(os.getcwd()).absolute()
      results_dir = current_dir.joinpath('results')
      kv_data_dir = results_dir.joinpath('kvdb')
      kv_data_dir.mkdir(parents=True, exist_ok=True)


      def _load_json(json_path):
          with open(json_path) as f:
              return json.load(f)


      class DocumentDB(object):
          def __init__(self, db_path):
              ## You can use the code from the previous exmaple if you would like
              people_json = kv_data_dir.joinpath('people.json')
              visited_json = kv_data_dir.joinpath('visited.json')
              sites_json = kv_data_dir.joinpath('sites.json')
              measurements_json = kv_data_dir.joinpath('measurements.json')

              self._db_path = Path(db_path)
              self._db = None
              self._person_lookup = _load_json(people_json)
              self._measurements_lookup=_load_json(measurements_json)
              self._site_lookup=_load_json(sites_json)
              self._visit_lookup=_load_json(visited_json)
              #TODO
              self._load_db()

          def _get_site(self, site_id):
              return self._site_lookup[str(site_id)]
```

```python
    def _get_measurements(self, person_id):
        measurements = []

        for values in self._measurements_lookup.values():
            measurements.extend([value for value in values if
→str(['person_id']) == str(person_id)])


        return measurements

    def _get_visit(self, visit_id):
        visit = self._visit_lookup.get(str(visit_id))
        #TODO
        site_id =str(visit['site_id'])
        #TODO
        site=self._site_lookup(site_id)
        visit['site'] = site

        return visit

    def _load_db(self):
        self._db = TinyDB(self._db_path)
        persons = self._person_lookup.items()
        for person_id, record in persons:
            measurements = self._get_measurements(person_id)
            visit_ids = set([measurement['visit_id'] for measurement in
→measurements])
            visits = []
            for visit_id in visit_ids:
                visit = self._get_visit(visit_id)
                visit['measurements'] = [
                    measurement for measurement in measurements
                    if visit_id == measurement['visit_id']
                ]
                visits.append(visit)

            record['visits'] = visits
            self._db.insert(record)
```

```python
[16]: db_path = results_dir.joinpath('patient-info.json')
      if db_path.exists():
          os.remove(db_path)

      db = DocumentDB(db_path)
```

```python
[ ]: # Thanks!!!
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