Project Name
Simple To Do List Application

Description
Simple application to make a list of tasks that build using Next JS and Django with GraphQL protocol. Users can add and remove tasks from the list. Users also can mark and unmark tasks as a completed task. The app has a feature to filter active and complete tasks. All data remain persistent in backend database.

Goals
- Test To Do list add and remove feature
- Test To Do list checklist feature
- Test To Do list filter feature

Approach
- Unit Test
  Testing ToDo model in Django
- API Test
  Testing GraphQL API query
- End to end Test (E2E Test)
  Testing feature from Next JS web client

Tools
- Django : default UnitTest module
- NextJS : Cypress

Step
- Unit Test
  Unit test can be done by typing this command in Python Django environment
    python manage.py test todo

- API Test
  API test can be done by typing this command in Python Django environment
    python manage.py test graph
- E2E Test
  E2E test can be done by typing this command in Python Django environment
    python manage.py testserver todo/todo-fixture.json
  and then run this command in Next JS environment
    npm run test

Conclusion and Recommendation

All tests run successfully. For the next update it seems better to use REST API for the backend in this relatively simple application as REST is much easier to implement and maintain.