Tinydb Test Final Report

Author: Xiqian Han, Yingyu Wu, Xu Han

Email: xhan5@kent.edu, ywu23@kent.edu, xhan9@kent.edu

1 Testing Strategy

1.1 Overall strategy

In order to test the Tinydb, our testing strategy will involve the system test. The system tests will be conducted as outlined in the "Test Cases" section below.

1.2 Test Selection

We will employ a black-box technique for the system tests (i.e., testing the functionality of the system without peering into the inner workings).

1.3 Test Criterion

System tests will be assessed by functional coverage, and it should cover most of the usercase with one or more system tests.

Funcational Test

- 1) Database connection
- 2) Query
- 3) Data type

No-Functional Test

- 1) Speed. The system should be able to return the result in 3 seconds.
- 2) Convenient. It should be easier for user to interact with it.

2 Test Cases

#	Test Name	Expected Result	Actual Result	Pass/Fail
1	Insert the data by Valid query	return the expect result	return the expect result	Pass
2	Search the data which is existing by Valid query	Data inserted	Data inserted	Pass
3	Modify the data which is existing by Valid query	Data modified	Data modified	Pass
4	Delete the data which is existing by Valid query	Data deleted	Data deleted	Pass
5	Search the data which is Not existing by Valid query	return nothing	return empty array	Pass
6	Modify the data which is Not existing by Valid query	return nothing	return None	Pass
7	Delete the data which is Not existing by Valid query	return nothing	return None	Pass
8	Insert repeat data	Data inserted	Data inserted	Pass

3 Obversation

TinyDB is really tiny. We found it's structure is json. It's very easy to insert, search, edit and delete data. Exceptions like searching, updating, deleting non-existing data are handled. Very efficient for creating simple data structure and don't need to worry too much about datatype errors.

4 ScreenShot

```
Wendys-MacBook-Pro:~ Wendy$ python3 testiny.py
case 1 insert data by valid query
.case 2 search existing data by valid query
.case 3 modify existing data by valid query
.case 4 delete existing data by valid query
.case 5 search Non-existing data by valid query
.case 6 modify Non-existing data by valid query
.case 7 Delete Non-existing data by valid query
.case 8 can insert existing data
.
```

Ran 8 tests in 0.007s

0K