

Melissa Gaines
Assignment 8: IoT
May 4, 2023

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Administrator: Command Prompt - python C:\Users\mjgai\Documents\327-hw8\Server.py

C:\WINDOWS\system32>python C:\Users\mjgai\Documents\327-hw8\Server.py
TCP Port: 4000
Received from 127.0.0.1 : best highway
Database collections: ['traffic data', 'traffic data metadata']
Table: Collection(Database(MongoClient(host=['ac-lpexqt-shard-00-00.ac0ucdm.mongodb.net:27017', 'ac-lpexqt-shard-00-02.ac0ucdm.mongodb.net:27017', 'ac-lpexqt-shard-00-01.ac0ucdm.mongodb.net:27017'], document_class=dict, tz_aware=False, connect=True, retrywrites=True, w='majority', authsource='admin', replicaset='atlas-thphx7-shard-0', tls=True), 'test'), 'traffic data')
Current Docs: []
Old Docs: [{'_id': ObjectId('64547c36e9b51d91aefc2ee'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 121, 'payload': {'timestamp': '1683258422', 'topic': 'Melissa/110 Freeway/Traffic', 'Traffic Sensor 91': 55}, 'topic': 'Melissa/110 Freeway/Traffic', 'time': datetime.datetime(2023, 5, 3, 47, 2), '_v': 0}, {'_id': ObjectId('64547c36e9b51d91aefc2f08'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 133, 'payload': {'timestamp': '1683258422', 'topic': 'Melissa/110 Freeway - 2/Traffic', 'Traffic Sensor 91 - 2': 31}, 'topic': 'Melissa/110 Freeway - 2/Traffic', 'time': datetime.datetime(2023, 5, 3, 47, 2), '_v': 0}, {'_id': ObjectId('64547c36e9b51d91aefc2f22'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 132, 'payload': {'timestamp': '1683258422', 'topic': 'Melissa/110 Freeway - 3/Traffic', 'Traffic Sensor 91 - 3': 6}, 'topic': 'Melissa/110 Freeway - 3/Traffic', 'time': datetime.datetime(2023, 5, 3, 47, 2), '_v': 0}, {'_id': ObjectId('64547c73e9b51d91aefc3106'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 121, 'payload': {'timestamp': '1683258483', 'topic': 'Melissa/110 Freeway/Traffic', 'Traffic Sensor 91': 27}, 'topic': 'Melissa/110 Freeway/Traffic', 'time': datetime.datetime(2023, 5, 3, 48, 3), '_v': 0}, {'_id': ObjectId('64547c73e9b51d91aefc3122'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 133, 'payload': {'timestamp': '1683258483', 'topic': 'Melissa/110 Freeway - 2/Traffic', 'Traffic Sensor 91 - 2': 39}, 'topic': 'Melissa/110 Freeway - 2/Traffic', 'time': datetime.datetime(2023, 5, 3, 48, 3), '_v': 0}, {'_id': ObjectId('64547c73e9b51d91aefc313c'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 132, 'payload': {'timestamp': '1683258483', 'topic': 'Melissa/110 Freeway - 3/Traffic', 'Traffic Sensor 91 - 3': 2}, 'topic': 'Melissa/110 Freeway - 3/Traffic', 'time': datetime.datetime(2023, 5, 3, 48, 3), '_v': 0}, {'_id': ObjectId('64547cae9b51d91aefc331a'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 121, 'payload': {'timestamp': '1683258542', 'topic': 'Melissa/110 Freeway/Traffic', 'Traffic Sensor 91': 36}, 'topic': 'Melissa/110 Freeway/Traffic', 'time': datetime.datetime(2023, 5, 3, 49, 2), '_v': 0}, {'_id': ObjectId('64547cae9b51d91aefc3338'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 133, 'payload': {'timestamp': '1683258542', 'topic': 'Melissa/110 Freeway - 2/Traffic', 'Traffic Sensor 91 - 2': 37}, 'topic': 'Melissa/110 Freeway - 2/Traffic', 'time': datetime.datetime(2023, 5, 3, 49, 2), '_v': 0}, {'_id': ObjectId('64547cae9b51d91aefc334e'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 133, 'payload': {'timestamp': '1683258542', 'topic': 'Melissa/110 Freeway - 3/Traffic', 'Traffic Sensor 91 - 3': 10}, 'topic': 'Melissa/110 Freeway - 3/Traffic', 'time': datetime.datetime(2023, 5, 3, 49, 2), '_v': 0}, {'_id': ObjectId('64547cebe9b51d91aefc3538'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 121, 'payload': {'timestamp': '1683258603', 'topic': 'Melissa/110 Freeway/Traffic', 'Traffic Sensor 91': 23}, 'topic': 'Melissa/110 Freeway/Traffic', 'time': datetime.datetime(2023, 5, 3, 50, 3), '_v': 0}, {'_id': ObjectId('64547cebe9b51d91aefc3556'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 133, 'payload': {'timestamp': '1683258603', 'topic': 'Melissa/110 Freeway - 2/Traffic', 'Traffic Sensor 91 - 2': 63}, 'topic': 'Melissa/110 Freeway - 2/Traffic', 'time': datetime.datetime(2023, 5, 3, 50, 3), '_v': 0}, {'_id': ObjectId('64547cebe9b51d91aefc356c'), 'cmd': 'publish', 'retain': False, 'qos': 0, 'dup': False, 'length': 132, 'payload': {'timestamp': '1683258603', 'topic': 'Melissa/110 Freeway - 3/Traffic', 'Traffic Sensor 91 - 3': 9}, 'topic': 'Melissa/110 Freeway - 3/Traffic', 'time': datetime.datetime(2023, 5, 3, 50, 3), '_v': 0}]
Message sent back to client.
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Administrator: Command Prompt - python C:\Users\mjgai\Documents\327-hw8\Client.py
C:\WINDOWS\system32>python C:\Users\mjgai\Documents\327-hw8\Client.py
Please enter the TCP port of the host...4000
Please type the message that you'd like to send (Or type "exit" to exit):
>best highway
Received from server : 110 Freeway
Please type the message that you'd like to send (Or type "exit" to exit):
>
```