Lab Assignment VII
Report
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Application Name: RESTful Java web Application with MongoDB Implementation.

Application Function: The application can be used to calculate area values of a rectangle and store it in MongoDB database. The user can perform CRUD(Create, Retrieve, Update, Delete) Operations on the values stored in MongoDB Database.

Tools Used:
Eclipse
Apache Tomcat Server
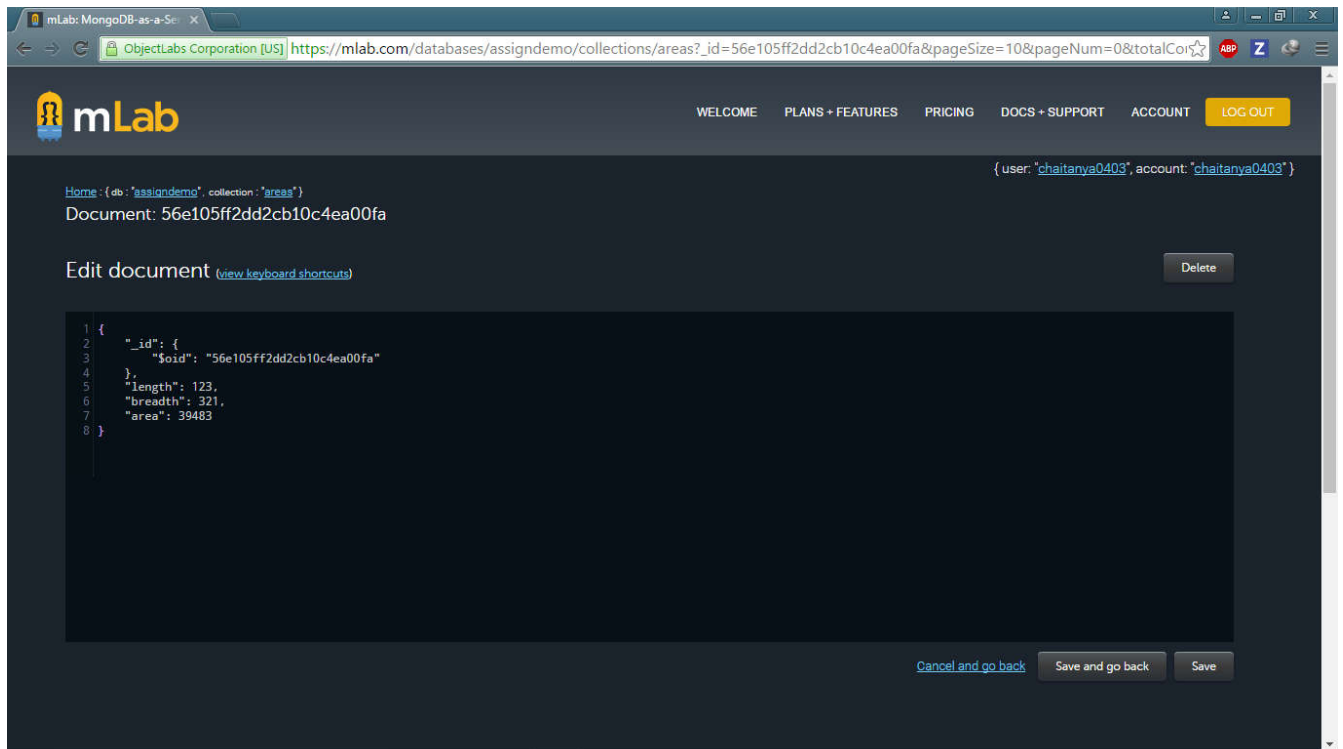MongoDB Software as a service (mlab.com)

Number of Pages: 4
AreaRect.java

Working:

1. The area of rectangle can be computed by giving the length and breadth of the rectangle in the URL. The area of the rectangle is then computed and the values of Length, Breadth and Area are stored in mlab database in json format.

2. The specific area json can be retrieved from the database by providing the area value in URL retrieve function.
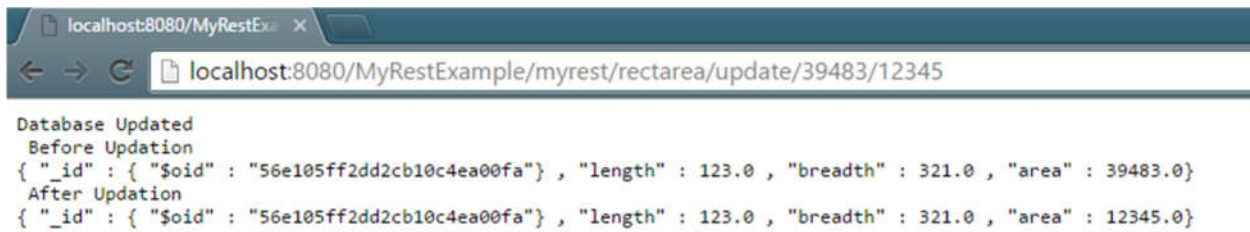

The entire contents of the database can also be seen in the console of the tomcat.
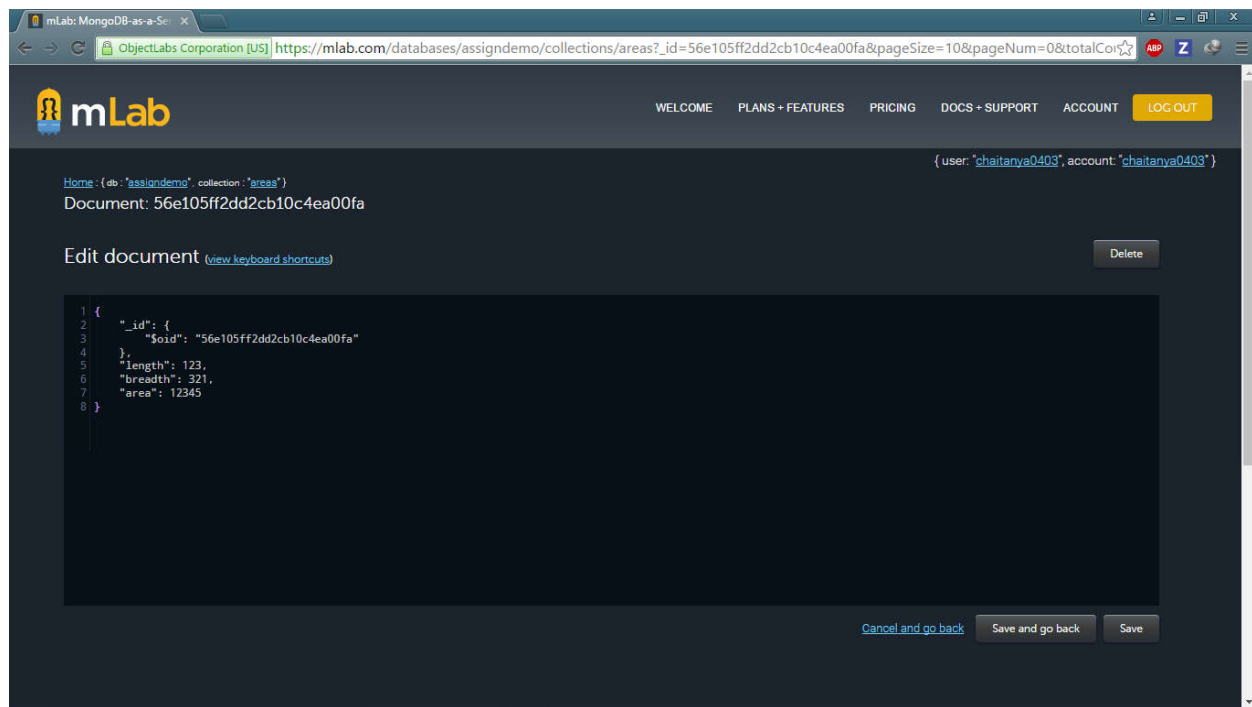
```
{ "_id" : { "$oid" : "56e0f9232dd2cb1e801a2158"} , "length" : 1000.0 , "breadth" : 20.0 , "area" : 20000.0}
{ "_id" : { "$oid" : "56e104312dd2cb10c42c444d"} , "length" : 1000.0 , "breadth" : 24.0 , "area" : 24.0}
{ "_id" : { "$oid" : "56e104972dd2cb10c452ce2b"} , "length" : 1000.0 , "breadth" : 22.0 , "area" : 22.0}
{ "_id" : { "$oid" : "56e104bd2dd2cb10c452ce2e"} , "length" : 1000.0 , "breadth" : 21.0 , "area" : 21.0}
{ "_id" : { "$oid" : "56e105ff2dd2cb10c4ea00fa"} , "length" : 123.0 , "breadth" : 321.0 , "area" : 39483.0}
```
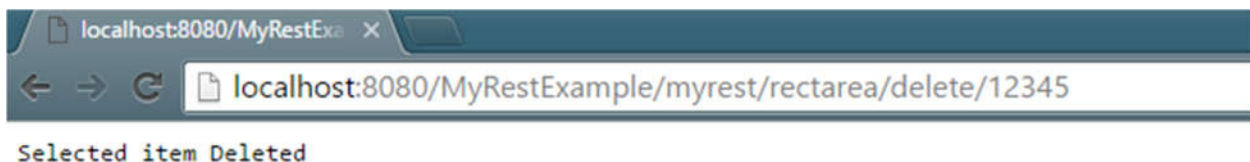
3. The values of database can be updated by specifying the old and new value in the URL with
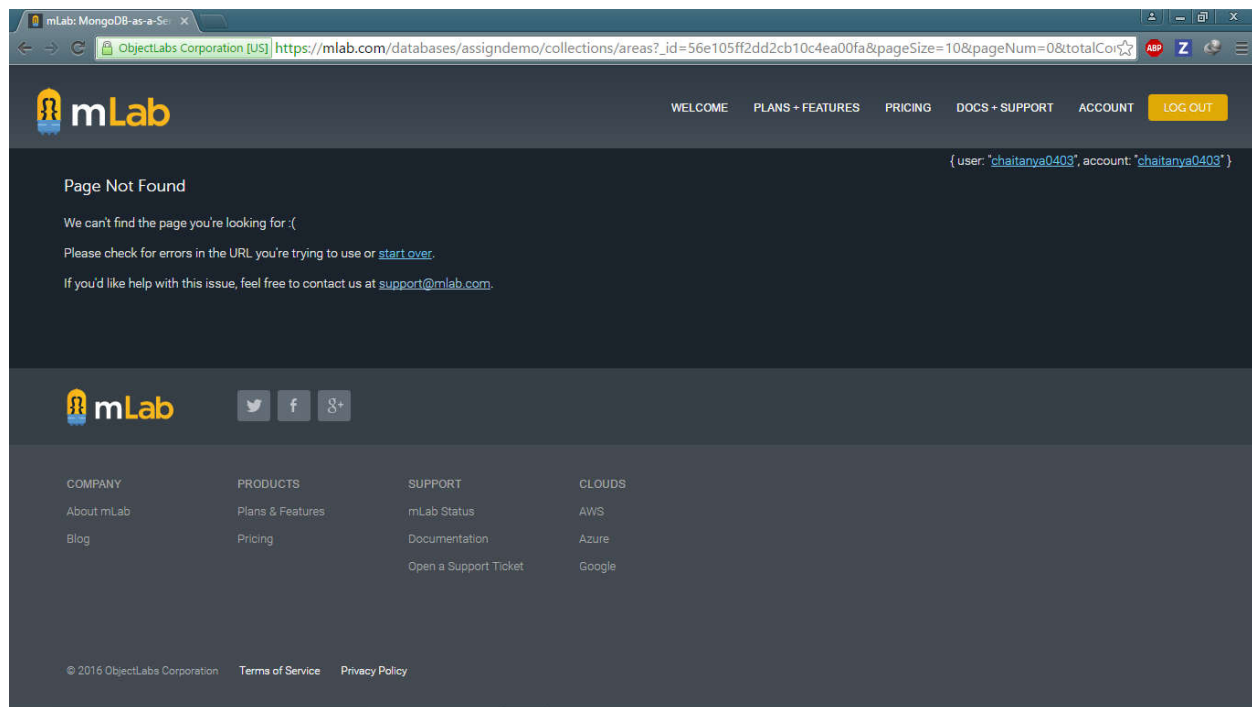   update function.


```
Database Updated
 Before Updation
{ "_id" : { "$oid" : "56e105ff2dd2cb10c4ea00fa"} , "length" : 123.0 , "breadth" : 321.0 , "area" : 39483.0}
 After Updation
{ "_id" : { "$oid" : "56e105ff2dd2cb10c4ea00fa"} , "length" : 123.0 , "breadth" : 321.0 , "area" : 12345.0}
```


4. The value can be deleted from the database by specifying it in URL with delete function.


```
Selected item Deleted
```

References:

1. http://docs.mlab.com/

2. https://docs.mongodb.org/manual/