Deployment and Implementation Plan ICSI418-Group-Project

4/30/2019

5:45pm

Goal

The idea of this project plan is to deploy and implement our locally hosted application to the AWS cloud platform. We plan to achieve this by implementing our front-end to AWS Elastic beanstalk, recreating our MySQL database on Amazon RDS and granting access to it through a AWS EC2 instance. From there we need to execute our previously used SQL scripts in order to initialize and fill our database with our test data, deploy and test to see that everything is working properly.

Estimated Completion Time

It should take no longer than **three hours**. Our backup meeting time will be in-class on Thursday to discuss possible technical problems with our stakeholder.

Deployment Steps

See Trello Sprint #7

1. Compile .war file in eclipse IDE using maven, see here.
2. Create a AWS account here.
3. Join AWS Educate here.
   a. Useful onboarding pdf here.
4. Create new AWS Elastic Beanstalk application.
   a. Specify application name and description.
5. Create environment in newly created application.
   a. Select Web server environment.
   b. Specify environment name, domain, description.
   c. Select Tomcat as platform.
   d. Upload previously compiled war.
6. Select configure more options.
7. Select Database > Modify.
   a. Engine: MySQL
   b. Engine version: 8.0.15
   c. Instance class: db.t2.micro

    d. Storage: 5GB
    e. Username: root
    f. Password: icsi2019
    g. Availability: Low

8. Select save.
9. Select create environment – this will take up to 10 minutes to complete.
10. Connect to web-app through environment URL. The application should *not* have access to the database, but should be accessible.
11. Now we allow access to our database from local MySQL Workbench solutions, see here.
12. Go to EC2 Dashboard under console.
13. Go to Security Groups tab.
14. Select the RDS database security group you just created.
15. Select Inbound > Edit.
16. Add Type: MYSQL/Aurora;Protocol:TCP;Range:3306;Source:0.0.0.0/0
17. Connect to database using endpoint of database instance, port #, username, password.
18. Use previously created SQL scripts to initialize and fill the database with test data. See here.
19. Update LoginEnum in Eclipse IDE with updated login information used in MySQL Workbench, then **redeploy**. See Upload and Deploy button on environment page.
20. Wait for redeploy to complete.
21. Connect to web-app through environment URL. The application should now have access to the database.
22. Done.