Deployment and Implementation Plan ICSI418-Group-Project

# 4/30/2019

## 5:45pm

# 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](https://trello.com/b/pfH92DPN/icsi-418-group-project) Sprint #7

1. Compile .war file in eclipse IDE using maven, see [here](https://www.vogella.com/tutorials/EclipseMaven/article.html).
2. Create a AWS account [here](https://signin.aws.amazon.com/signin?redirect_uri=https%3A%2F%2Faws.amazon.com%2Fmarketplace%2Fmanagement%2Fsignin%3Fstate%3DhashArgs%2523%26isauthcode%3Dtrue&client_id=arn%3Aaws%3Aiam%3A%3A015428540659%3Auser%2Faws-mp-seller-management-portal&forceMobileApp=0).
3. Join AWS Educate [here](https://aws.amazon.com/education/awseducate/).
   1. Useful onboarding pdf [here](https://cpb-us-e1.wpmucdn.com/wordpressua.uark.edu/dist/a/374/files/2018/09/AWS-Student-Onboarding-Doc-1ln47cz.pdf).
4. Create new AWS Elastic Beanstalk application.
   1. Specify application name and description.
5. Create environment in newly created application.
   1. Select Web server environment.
   2. Specify environment name, domain, description.
   3. Select Tomcat as platform.
   4. Upload previously compiled war.
6. Select configure more options.
7. Select Database > Modify.
   1. Engine: MySQL
   2. Engine version: 8.0.15
   3. Instance class: db.t2.micro
   4. Storage: 5GB
   5. Username: root
   6. Password: icsi2019
   7. 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](https://stackoverflow.com/questions/37212945/aws-cant-connect-to-rds-database-from-my-machine).
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](https://github.com/lprescott/ICSI418-Group-Project/tree/master/sql).
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.