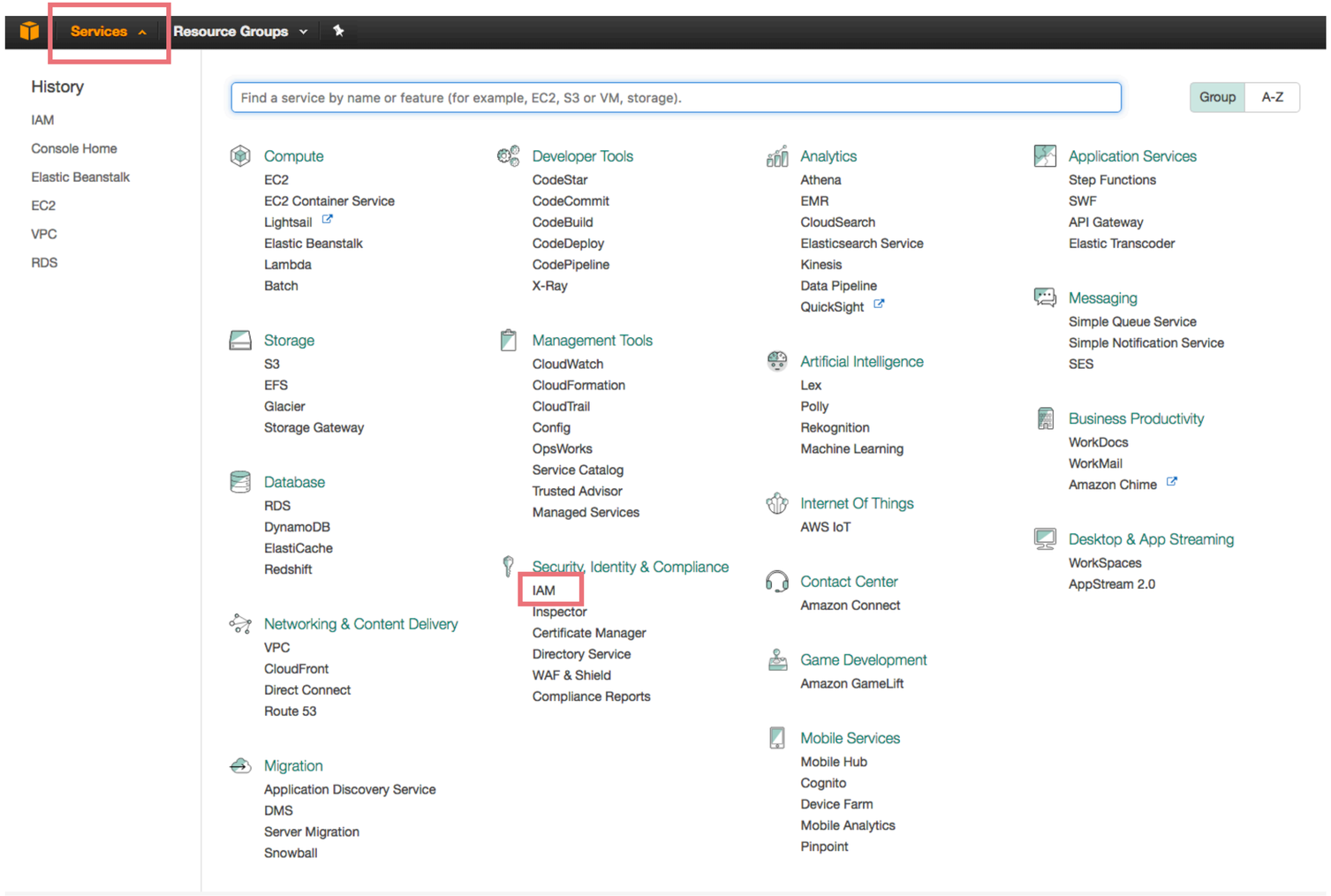
Lab 08
Deploy your app to AWS

Datalab

IAM

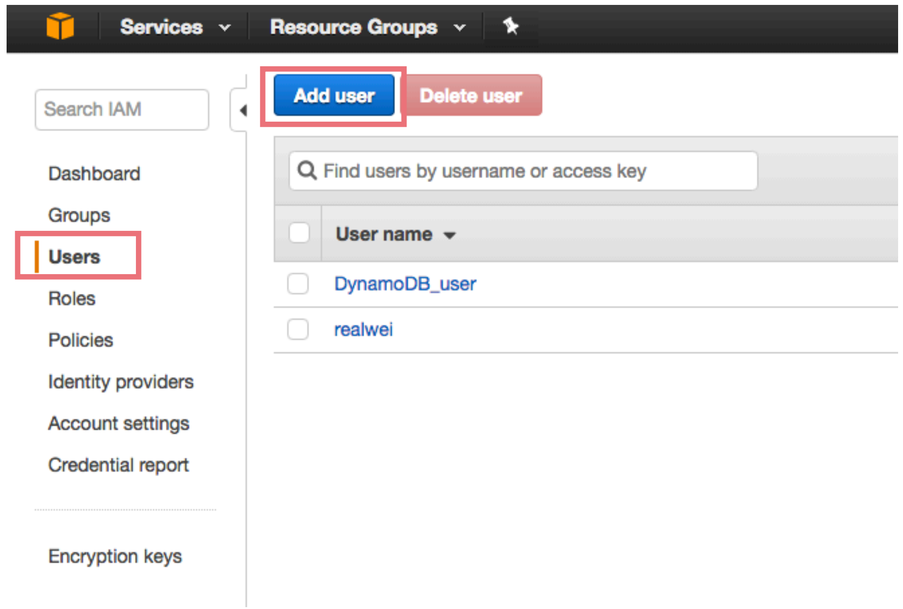
- Services -> IAM



IAM

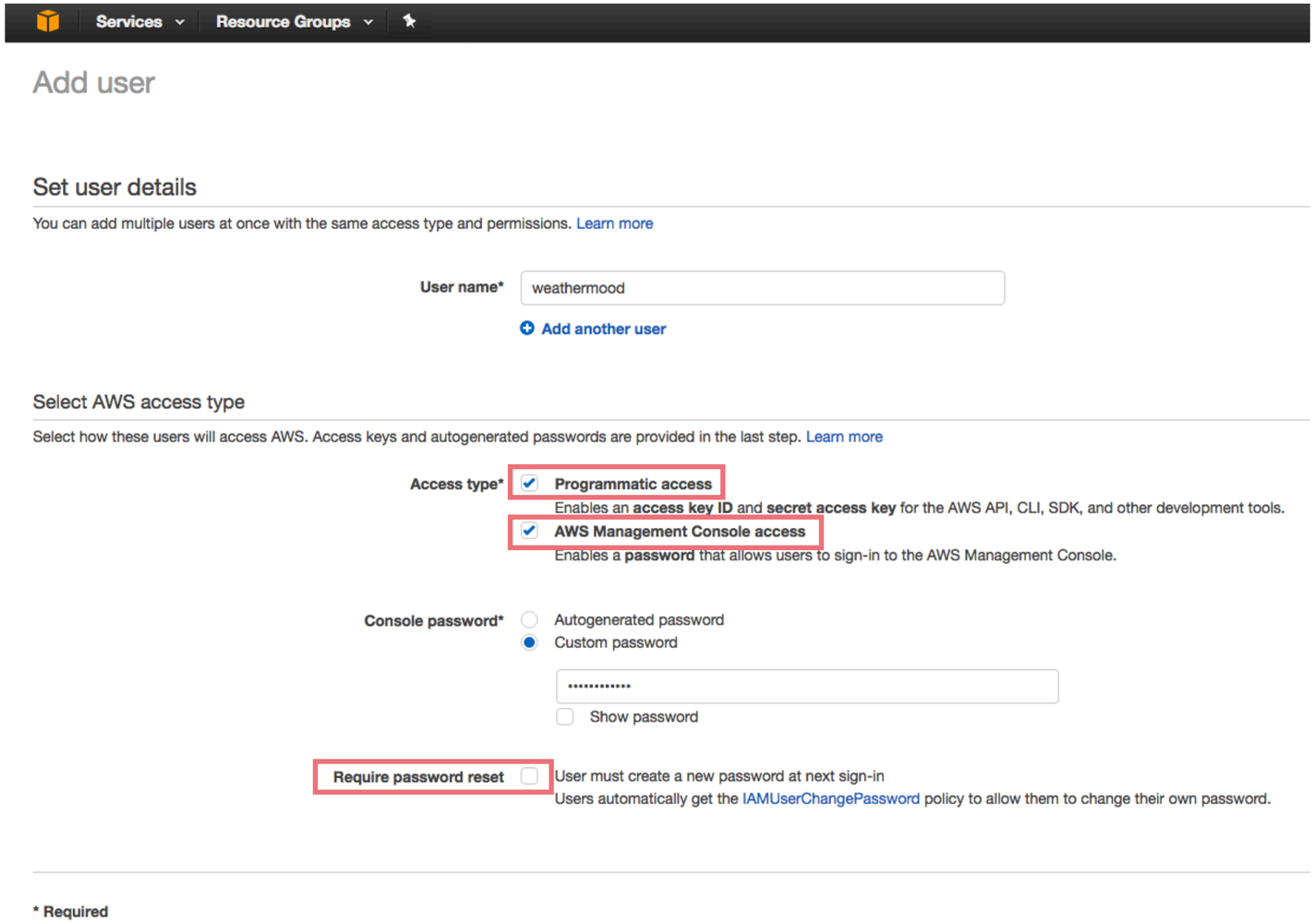
- For security reason, we have to create new user with less permissions.

- Users -> Add user



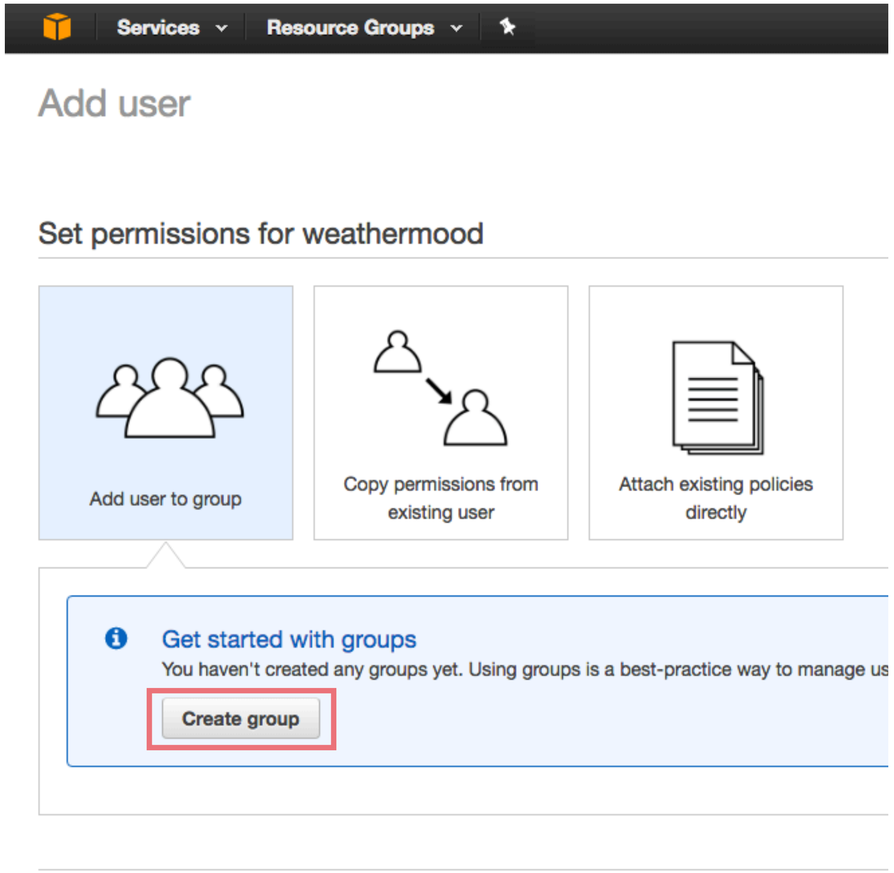
IAM

- Check "Programmatic access" and "AWS Management Console access"
- Uncheck "Require password reset" if you want to keep the custom password



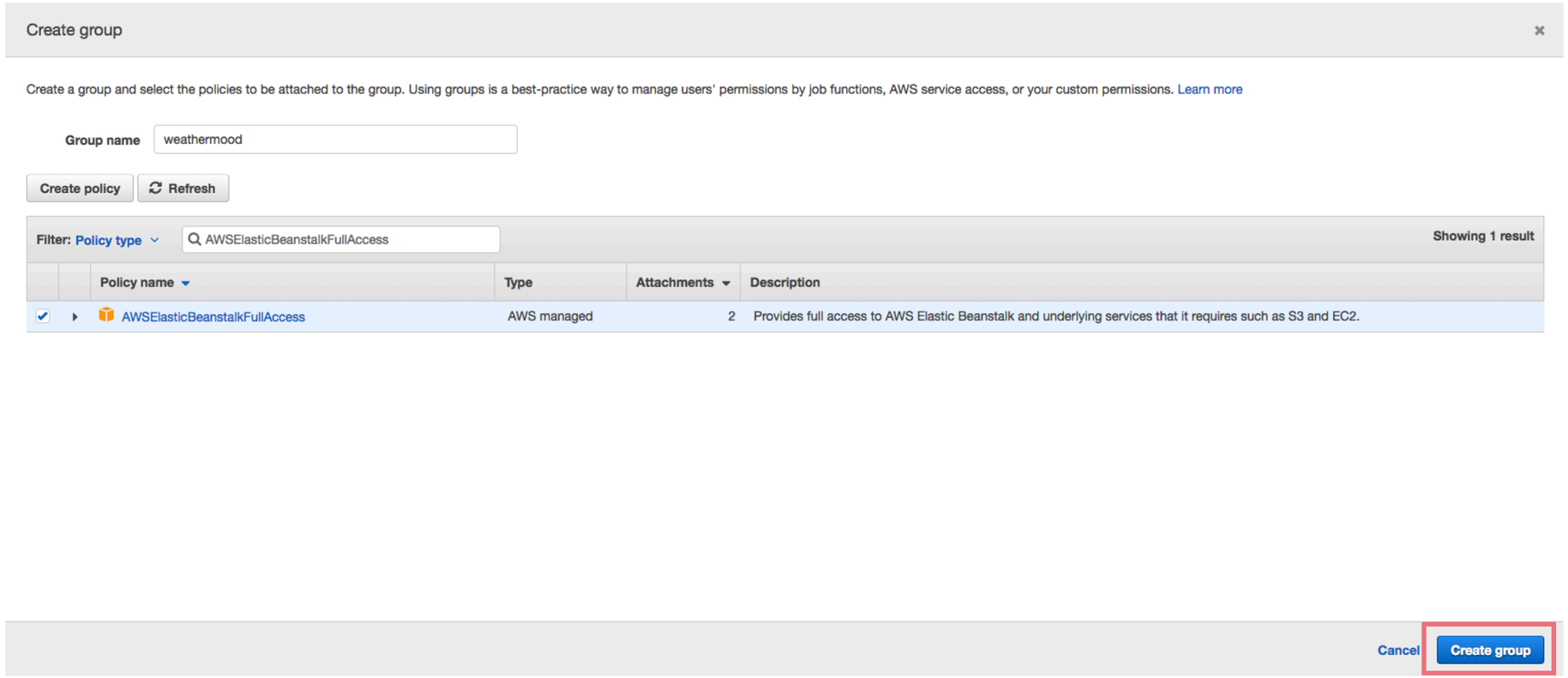
IAM

- Create group



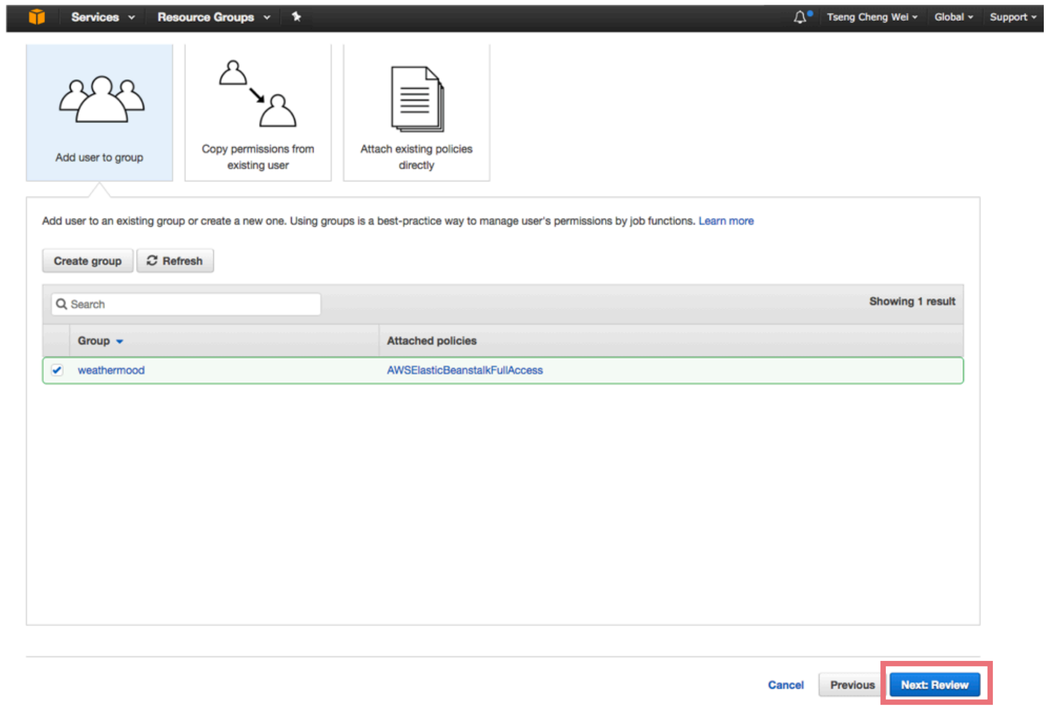
IAM

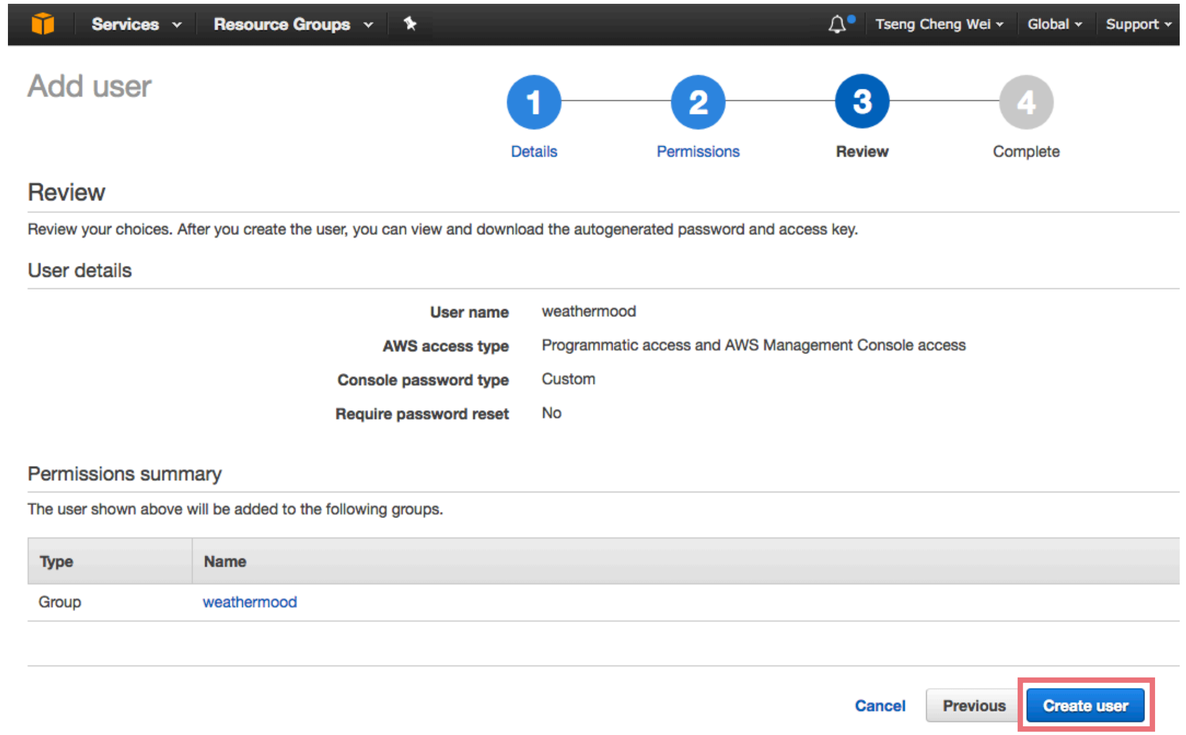
- Search "AWSElasticBeanstalkFullAccess"
- You can modify permissions in IAM -> Groups afterward



IAM

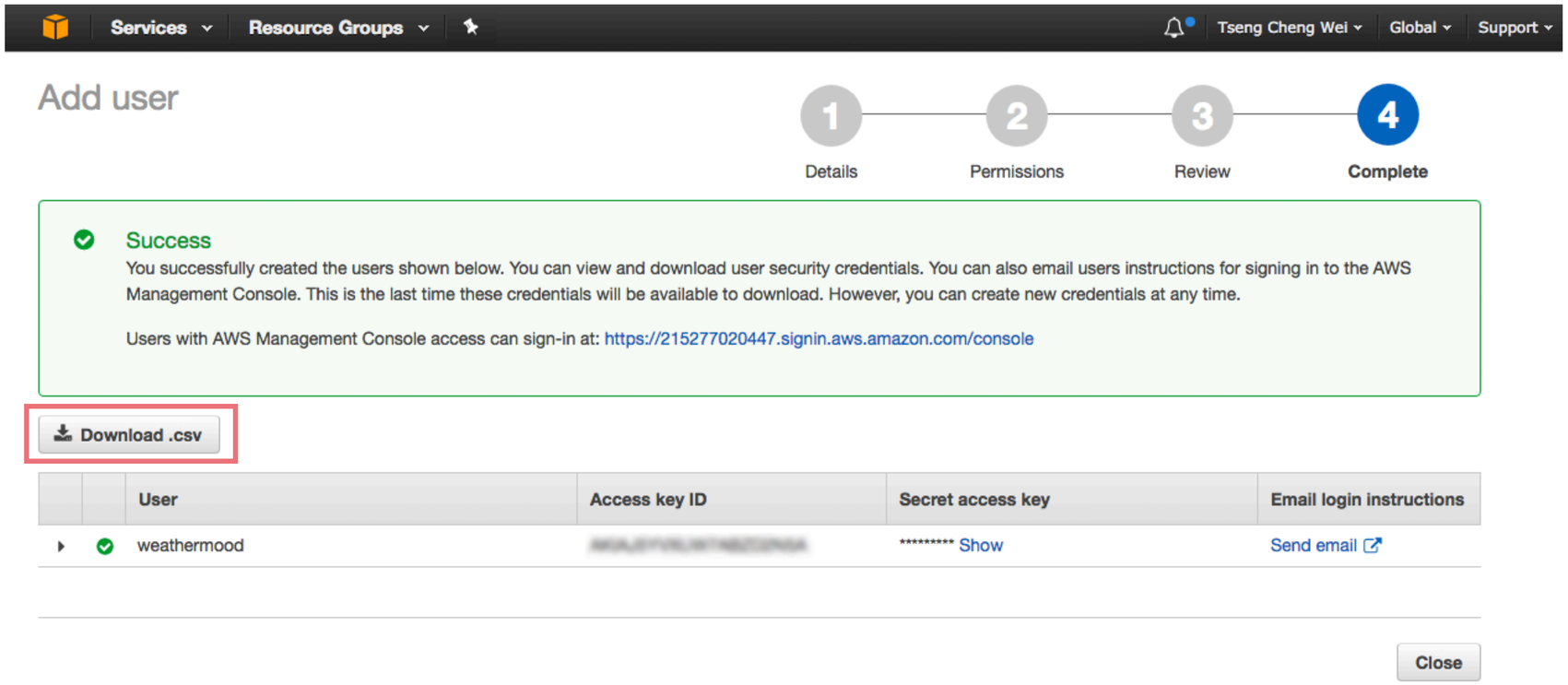
- Next: Review -> Create user





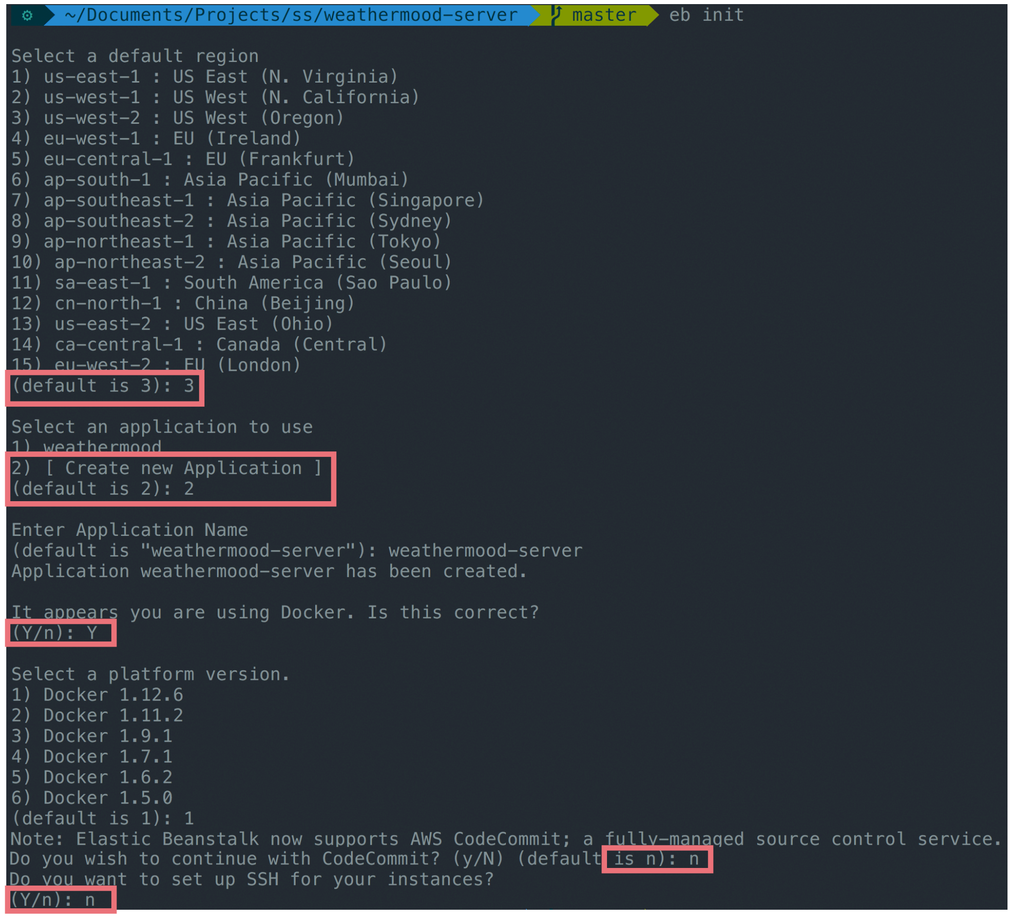
IAM

- Download .csv file



awsebcli

- `pip install --upgrade awsebcli`
  `// under weathermood-server`
  `eb init`



awsebcli

- The cli will ask for your access key and secret key for the first time

```
ERROR: The current user does not have the correct permissions. Reason: Operation Denied. The security token included in the reques
t is invalid.
You have not yet set up your credentials or your credentials are incorrect
You must provide your credentials.
(aws-access-id): [redacted]
(aws-secret-key): [redacted]
```

awsebcli

- `eb create --single`
  Enter **weathermood-${group id}** for DNS CNAME prefix
  e.g. weathermood-1 for group 1

```
~/Documents/Projects/ss/weathermood-server  master  eb create --single
Enter Environment Name
(default is weathermood-server-dev):
Enter DNS CNAME prefix
(default is weathermood-server-dev):
Creating application version archive "app-5f5e-170501_184230".
Uploading weathermood-server/app-5f5e-170501_184230.zip to S3. This may take a while.
Upload Complete.
Environment details for: weathermood-server-dev
  Application name: weathermood-server
  Region: us-west-2
  Deployed Version: app-5f5e-170501_184230
  Environment ID: e-nfspyamd7p
  Platform: arn:aws:elasticbeanstalk:us-west-2::platform/Docker running on 64bit Amazon
  Tier: WebServer-Standard
  CNAME: weathermood-server-dev.us-west-2.elasticbeanstalk.com
  Updated: 2017-05-01 10:42:39.230000+00:00
Printing Status:
INFO: createEnvironment is starting.
INFO: Using elasticbeanstalk-us-west-2-215277020447 as Amazon S3 storage bucket for envi
INFO: Created EIP: 35.161.172.169
INFO: Created security group named: awseb-e-nfspyamd7p-stack-AWSEBSecurityGroup-VJPZG8P0
INFO: Environment health has transitioned to Pending. Initialization in progress (runnin
INFO: Waiting for EC2 instances to launch. This may take a few minutes.
INFO: Added instance [i-0ea45d6416fc784a4] to your environment.
INFO: Successfully pulled node:6.10
INFO: Successfully built aws_beanstalk/staging-app
INFO: Docker container 70de32ad0e43 is running aws_beanstalk/current-app.
INFO: Environment health has transitioned from Pending to Info. Initialization in progre
 for 4 minutes).
INFO: Successfully launched environment: weathermood-server-dev
```

awsebcli

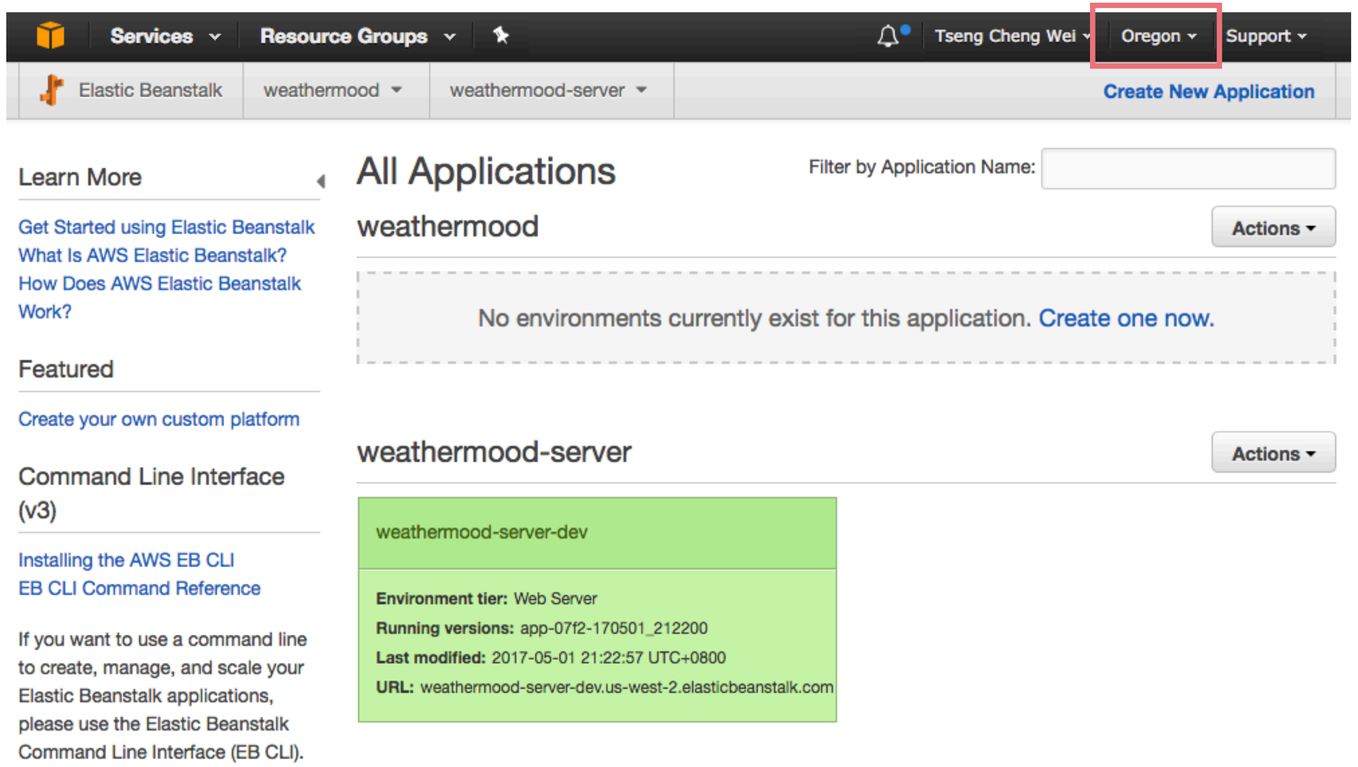
- `eb deploy <env>`

```
~/Documents/Projects/ss/weathermood-server  master  eb deploy
Creating application version archive "app-07f2-170501_212200".
Uploading weathermood-server/app-07f2-170501_212200.zip to S3. This may take a while.
Upload Complete.
INFO: Environment update is starting.
INFO: Deploying new version to instance(s).
INFO: Successfully pulled node:6.10
INFO: Successfully built aws_beanstalk/staging-app
INFO: Docker container f895c9c6f2c9 is running aws_beanstalk/current-app.
INFO: New application version was deployed to running EC2 instances.
INFO: Environment update completed successfully.
```

- It will deploy committed changes only. Therefore, you have to commit before you deploy.

awsebcli

- If your application is not showing in the AWS console, please choose the region which you deployed you application to.



Security

- Don't upload your accessKey.csv
  (Add it into .gitignore or keep it elsewhere)

- **!!!Don't put access key and secret key in you code!!!**

Today's Mission

- For each group, implement TODO feature for both server and client
  - Server : model and router
  - Client : api/todos.js

  And deploy to AWS

- You can deploy server and client to different website
  (Remember to add Access-Control-Allow-Origin in your response header)

- Your client url should be
  http://weathermood-${group id}.${region}.elasticbeanstalk.com
  e.g. http://weathermood-101.us-west-2.elasticbeanstalk.com/

- Submit your code to lab9-weathermood-server

- Deadline : 5/9 23:59