# Deployment Guidelines(Backend)

## Overview:

There are 3 components run on the backend:

1. Backend Application (All the backend code run on it).
2. MongoDB (The database)
3. Nginx (A file server)

## Minimum Requirement:

1. JDK1.8

## Deploy the application on AWS

### Backend application:

- Connect to your cloud server via SSH
- Make sure you have installed jdk1.8 on your cloud server. To check whether you have installed JDK, you can input the command: *java -version*. If you can see the following information, it means that JDK is running.

```
ubuntu@ip-172-26-14-177:~$ java -version
openjdk version "1.8.0_272"
OpenJDK Runtime Environment (build 1.8.0_272-8u272-b10-0ubuntu1~18.04-b10)
OpenJDK 64-Bit Server VM (build 25.272-b10, mixed mode)
```

- Run the backend application via command: *nohup java -jar idecide-0.0.1-SNAPSHOT.jar*  (make sure the file "idecide-0.0.1-SNAPSHOT.jar" is under the current folder)

```
ubuntu@ip-172-26-14-177:~$ nohup java -jar idecide-0.0.1-SNAPSHOT.jar
```

### Mongodb:

- Connect to your cloud server via SSH
- run the mongodb via command: *sudo service mongodb start* (make sure the port of your mongodb should be changed from 27017 to 27010 in order to enhance database security)

### Nginx:

- Connect to your cloud server via SSH
- run the nginx via command:  nginx -c /home/ubuntu/idecide_backend/