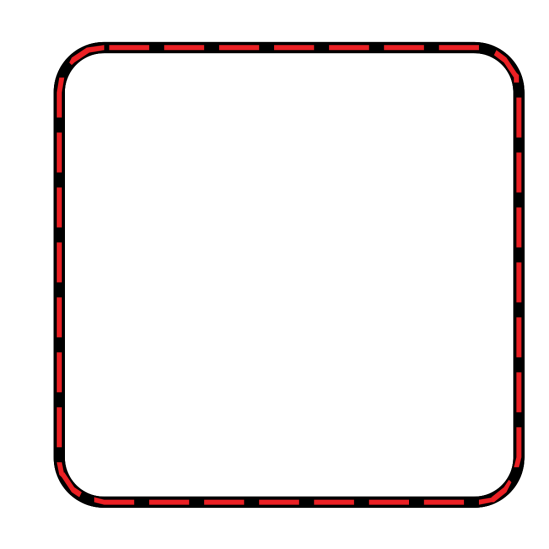
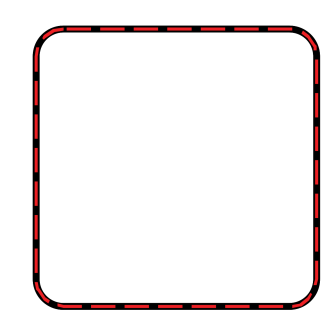
**AWS Cloud for web app setup [Lift& shift]**

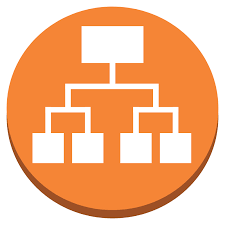
1. **Stack Architecture:**

****

****

**URL=> ELB endpoint**

**DNS private zones**

****

**Tomcat instances**

**8080**

**ELB**

**DNS zones**

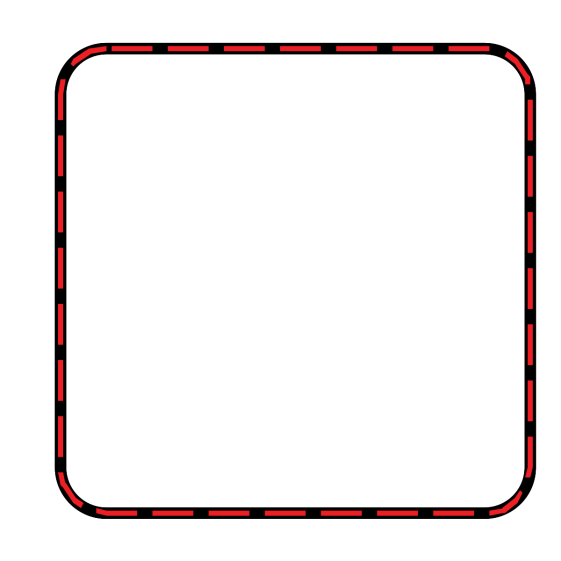
****

**Auto Scaling Group**

**Users**

**Security group**

**Security group**

****

****

**RabbitMQ instances**

**Memcachd instances**

****

**MySQL instances**

1. **Flow of execution:**

* Login to AWS account
* Create key pairs
* Create security groups
* Launch instances with user data
* Update IP to name mapping in route 53
* Build app from source code
* Upload to S3 bucket
* Download artifact to Tomcat EC2 instance
* Setup ELB with HTTPS( Certificate from ACM)
* Map ELB Endpoint to website name in Godaddy DNS
* Verify

1. **Tools used:**

* **Spring MVC:** Allows building web apps in java

**//To use Spring MVC, we must first declare its dependency in the pom.xml file of our Maven project//**

* **Spring security:** Powerful and highly customizable authentication and access-control framework.

**//It is the de-facto standard for securing Spring-based applications.//**

* **Spring DATA JPA:** Part of the larger Spring Data family, makes it easy to easily implement JPA based repositories.

**// Java Persistence API : Java programming interface that allows developers to organize relational data in applications using the Java platform.//**

* **Maven:** A production management and automation tool for Java software projects in general and Java EE in particular.

**//It is used to automate continuous integration during software development. Maven is maintained by the Apache Software.//**

* **JSP:** Java Server Pages is a Java technology that allows the generation of dynamic web pages.

**// JSP technology makes it possible to separate the presentation in the form of HTML code and the processing written in Java in the form of JavaBeans or servlets.//**

* **MySQL.**

1. **Common notions:**

* **Maven artifact:**

An artifact is a file, usually a JAR, that gets deployed to a Maven repository.

A Maven build produces one or more artifacts, such as a compiled JAR and a "sources" JAR.

Each artifact has a group ID (usually a reversed domain name, like com.example.foo), an artifact ID (just a name), and a version string. The three together uniquely identify the artifact.

A project's dependencies are specified as artifacts.