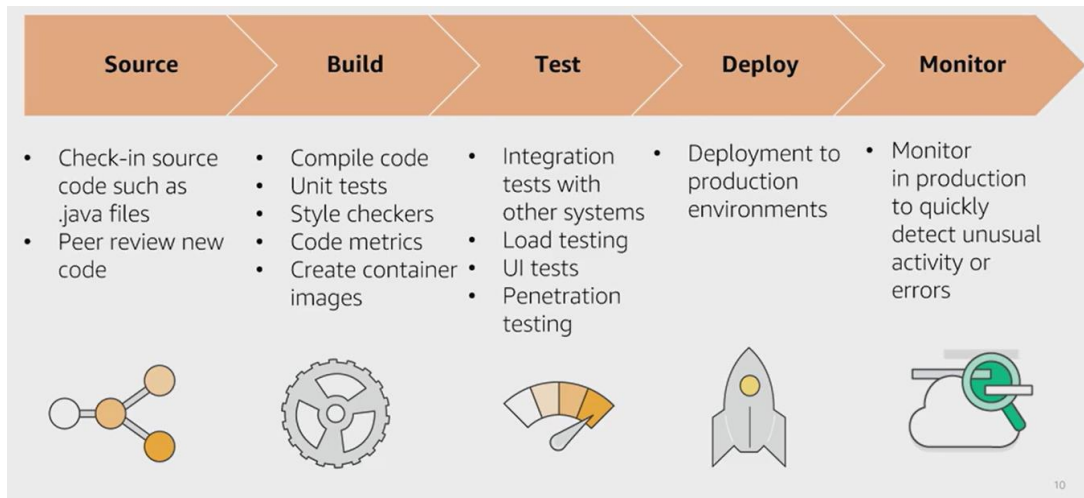**Domain 1:**
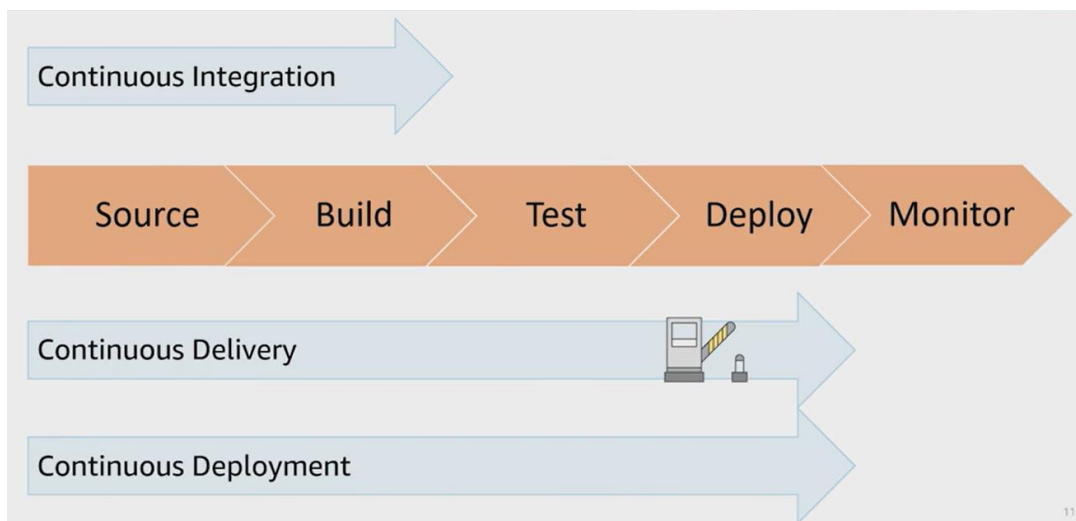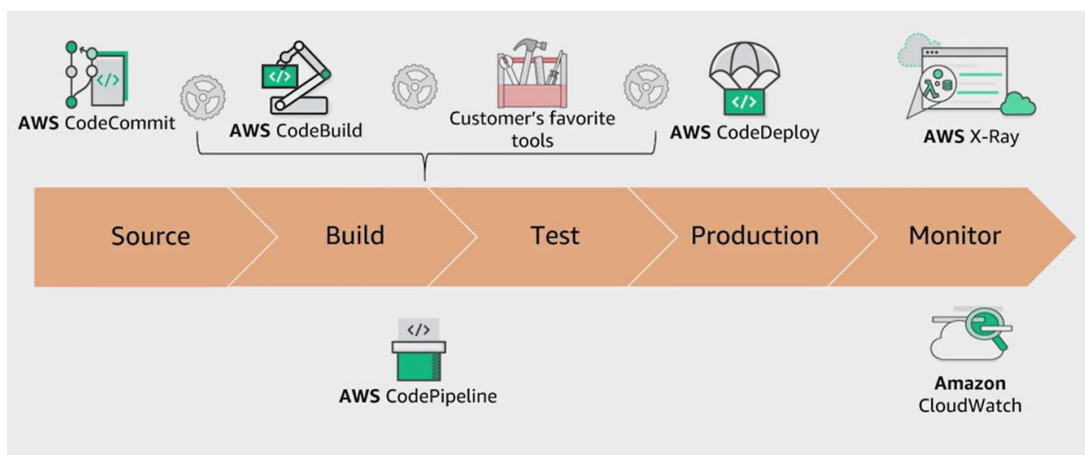
Deployment:

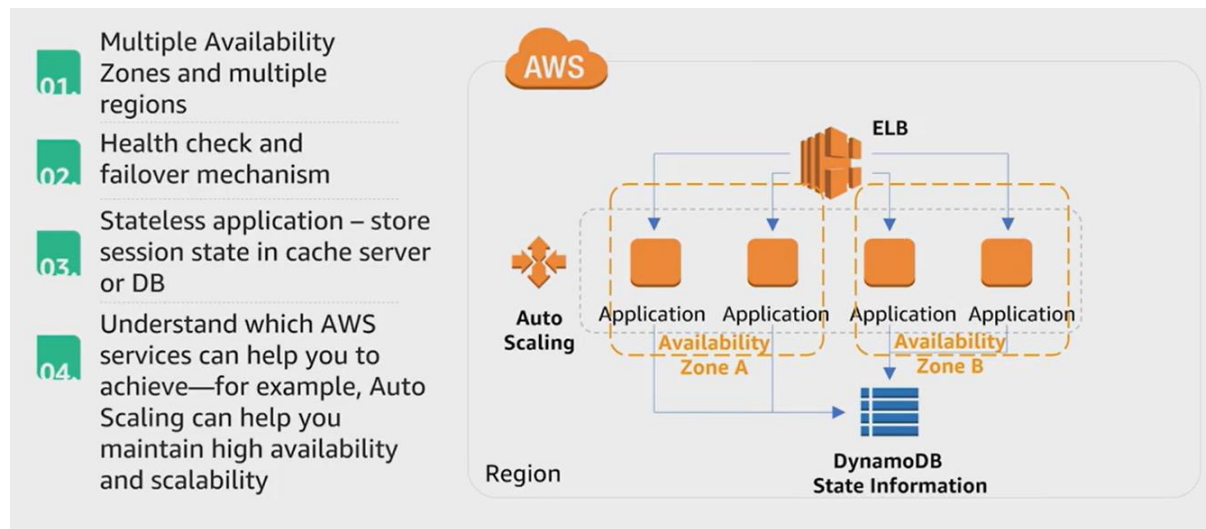Release process major phases:

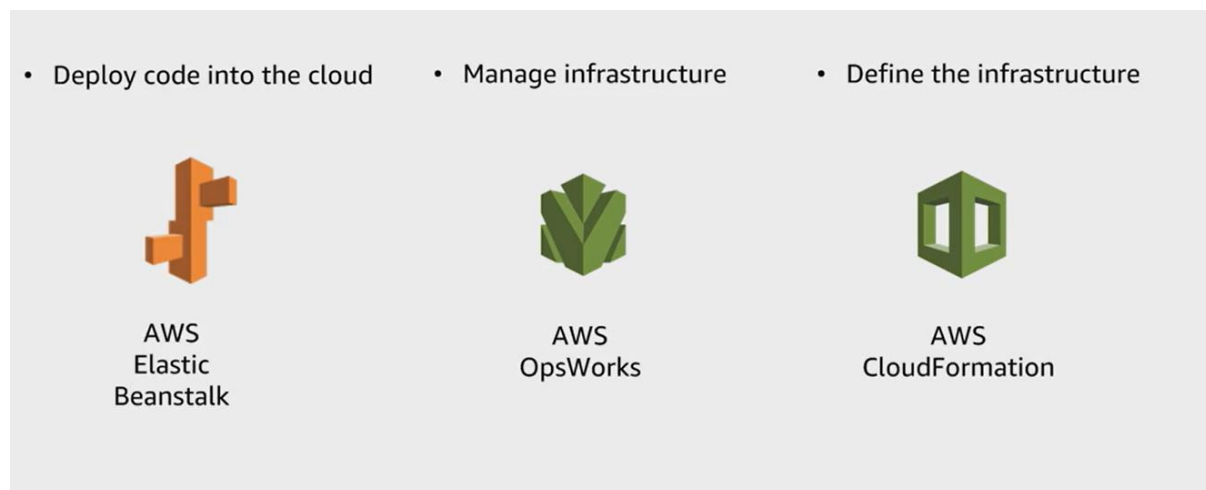Understanding CI/CD process:

AWS services which we can use in deployment process:

Deploying highly available and scalable applications:

Deployment and maintenance:

AWS Beanstalk:

- Elastic Beanstalk directly takes in out project code. So Elastic Beanstalk application is named the same as your project home directory.

- Users may want their application to run on different environments like DEV, UAT and PROD. You can create and configure different environments to run application on different stages.

- AWS runs automatic health checks on all EC-2 deployments (Elastic Beanstalk is a managed EC-2 service) which can be monitored from AWS console. For example, in case of web applications AWS will regularly, as scheduled by the developers, ping the application to check if the response is status code 200 and the application is running as expected. Health check responses:
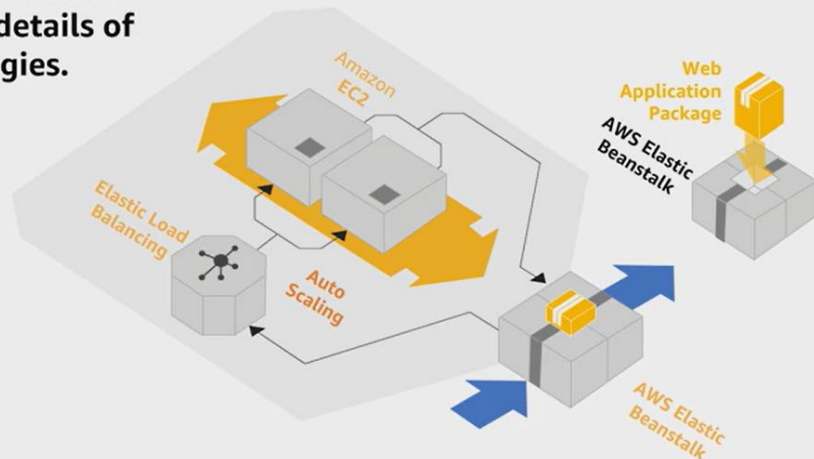
Deploy applications without worrying about the details of underlying technologies.

Components
- Environment
- Application versions
- Configuration

Permission Model
- Service role
- Instance role

Amazon EC2

Web Application Package

AWS Elastic Beanstalk

Elastic Load Balancing

Auto Scaling

AWS Elastic Beanstalk

Focus on building your application — Your code

Installed and configured by AWS
- HTTP server
- Application server
- Language interpreter
- Operating system
- Host

Provided by you | Provided and managed by Elastic Beanstalk

Update version

Create application → Upload version → Launch environment → Manage environment

Deploy new version