

CI/CD DEPLOYMENT FOR SPRING BOOT APPLICATION

DESCRIPTION

Project Objective:

As a Full Stack Developer, you have to build a CI/CD pipeline to demonstrate continuous deployment and host the application on AWS EC2 instance.

Background of the problem statement:

As the project is in the final stage, management has asked you to automate the integration and deployment of the web application. You are required to set up an environment where the application will be hosted and accessed by users. The source code is supposed to be fetched from a GitHub repository.

You must use the following:

- Eclipse
- GitHub
- Jenkins
- AWS EC2/ Virtual machine

Following requirements should be met:

- A part of the source code should be tracked on the GitHub repository. You need to document the tracked files that are ignored during the final push to the GitHub repository.
- The submission of your GitHub repository link is mandatory. In order to track your task, you need to share the link of the repository in the document.
- The step-by-step process involved in completing this task should be documented.

CODE

DEFAULT.CSS:-

```
body {
  background-image: linear-gradient(180deg, #0088bb, #000000);
  margin:0; padding:0;
  overflow-x:hidden;
  height:100%;
  font-family: 'Lato', Helvetica, arial, sans-serif;
  font-weight: 300;
  font-size: 20px;
  line-height: 1.45;
  color: #eee;
  color: rgba(255,255,255,.85);
}
#container {
  padding-top: 50px;
}
#content {
```

```

        max-width: 43em;
        padding: 10px;
        margin: 0 auto;
    }
    h1 {
        font-size: 4.8em;
        font-weight: 100;
        text-transform: uppercase;
        margin: 0;
    }
    h3 {
        font-size: 2.4em;
        font-weight: 300;
        line-height: 1.5;
    }
    p, li {
        font-size: 1.7em;
    }
    a {
        font-weight: 700;
        text-decoration: none;
        color: #fff;
    }
    a:hover {
        text-decoration: underline;
    }
    p#pLeft {
        max-width: 20em;
        float: left;
    }
    p#pRight {
        max-width: 20em;
        float: left;
    }
    ul {
        clear: both;
    }

```

```

html { font-size: 62.5%; }
body { font-size: 1em; }

```

```

/* SOURCE REFERENCE (Provided by Developer Gadhe Hariharan)/
/* please credit the adopted pyramid shape to my reference at:
(https://codepen.io/ZachSaucier) */

```

```

/* PYRAMID CODE */
.stage {
    -webkit-transform: scale(1.85);
    transform: scale(0.85);
    float: right;
    margin-right: 120px;
    margin-top: 30px;
    width: 0px; height: 0px;
}

```

```

position: relative;
-webkit-perspective: 1200px;
-webkit-perspective-origin: 50% 50%;
perspective: 1200px;
perspective-origin: 50% 50%;
}
.pyramid3d {
position: relative;
width: 150px;
height: 150px;

-webkit-transform-style: preserve-3d;
transform-style: preserve-3d;
-webkit-transform: rotateX(75deg) rotate(65deg);
transform: rotateX(75deg) rotate(65deg);
-webkit-animation: turnPyramid 10s linear infinite;
animation: turnPyramid 10s linear infinite;
}
.triangle {
-webkit-transform-style: preserve-3d;
transform-style: preserve-3d;
width: 0; height: 0;
background: none;
}
.triangle:before {
content: "";
position: absolute;
height: 0; width: 0;
border-style: solid;
border-width: 176px 75px 0 75px;
}
.side1 { -webkit-transform: translateX(0) rotateY(115.2deg)
rotateZ(90deg); transform: translateX(0) rotateY(115.2deg) rotateZ(90deg);
}
.side2 { -webkit-transform: translateX(150px) rotateZ(90deg)
rotateX(64.8deg); transform: translateX(150px) rotateZ(90deg)
rotateX(64.8deg); }
.side3 { -webkit-transform: translateZ(0) rotateX(64.8deg); transform:
translateZ(0) rotateX(64.8deg); }
.side4 { -webkit-transform: translateY(150px) rotateX(115.2deg);
transform: translateY(150px) rotateX(115.2deg); }
.side1:before { border-color: rgba(115, 115, 0, 0.3) transparent
transparent transparent; }
.side2:before { border-color: rgba(20, 90, 225, 0.3) transparent
transparent transparent; }
.side3:before { border-color: rgba(255, 0, 0, 0.3) transparent
transparent transparent; }
.side4:before { border-color: rgba(0, 255, 255, 0.3) transparent
transparent transparent; }

@-webkit-keyframes turnPyramid { 100% { -webkit-transform: rotateX(75deg)
rotate(425deg); } }

```

```

@keyframes turnPyramid { 100% { transform: rotateX(75deg) rotate(425deg);
} }

@media (max-width: 300px) {
  html { font-size: 70%; }
  .stage { -webkit-transform:scale(0.05); transform:scale(0.05); }
}
@media (max-width: 440px) {
  h1 { line-height:55px; }
}
@media (max-width: 460px) {
  .stage { position:absolute; top:25px; left:50%; margin-left:-45px; }
  h1 { margin-top:50px; text-align:center; }
}
@media (max-width:600px) { .stage { -webkit-transform:scale(0.55);
transform:scale(0.55); margin-right:60px; } }
@media (min-width: 600px) {
  html { font-size: 80%; }
  .stage { -webkit-transform:scale(0.68); transform:scale(0.68); margin-
right:80px; }
}
@media (min-width: 880px) {
  html { font-size: 120%; }
  p, li { font-size: 1em; }
  p#pright { margin-left:3em; }
  .stage { -webkit-transform:scale(0.85); transform:scale(0.85); margin-
right:120px; }
}

```

INDEX.HTML:-

```

<!DOCTYPE html>
<link rel="stylesheet" type="text/css" href="../../css/default.css" >

<html lang="en">

<head>
<title>Gadhe hariharan's Assessment</title>

<!-- Bootstrap -->
<link type="text/css" href="css/bootstrap.min.css" rel="stylesheet" />
<link type="text/css" href="css/default.css" rel="stylesheet" />

</head>
<body>

    <div id="container">
        <div id="content">
            <div id="about">
                <h1>

```

```

16px;'>Gadhe hariharan's
side1"></div>
side2"></div>
side3"></div>
side4"></div>
<div style='float: left; margin-bottom:
</div>
<div class="stage">
    <div class="pyramid3d">
        <div class="triangle
            <div class="triangle
                <div class="triangle
                    <div class="triangle
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
</h1>
<h3 style='clear: both' class="subhead">
    <a>SPRING-BOOT</a> Web App
</h3>
<p id='pleft'>As requested by management, this is
my final
product stage, demonstrating the automated,
integrated, and
deployed spring-boot web application.</p>
<p id='pright'>This is an environment where the
application is
hosted and accessed by users. The following
were used in its
development:</p>
<ul>
    <li><a>Eclipse</a></li>
    <li><a>GitHub</a></li>
    <li><a>Jenkins</a></li>
    <li><a>AWS EC2/ Virtual machine</a></li>
</ul>
<p>Feel free to contact Gadhe hariharan with any
new requests or
upgrades to this product!</p>
</div>
</div>
</div>
</body>
</html>

```

MAIN CONTROL JAVA:-

```

import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.stereotype.Controller;

```

```
@Controller
public class MainController {

    @RequestMapping("/")
    public String index() {
        return "index.html";
    }
}
```

MY APPLICATION JAVA:-

```
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class MyApplication {

    public static void main(String[] args) {

        SpringApplication.run(MyApplication.class, args);
    }
}
```