

# DevOps Projects

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## 1. Java Application using Gradle

Gradle is a well-known build automation tool that works across a variety of platforms and languages. This project includes establishing a Java application and breaking it down into subprojects in order to modularize it.

After completing this project, you will know how to initialize a project as Java application, run the build and build it's test report. You will learn the way to execute a Java application and build it in an archive.

[Check Source Code](#)

## 2. WebServer using Docker

Docker is a popular container technology for hosting services and applications that virtualizes operating systems and builds lightweight containers. You will create a default base image for this project that other developers can use in their production environments. This project offers the framework for web app images in Python, Ruby, and Meteor.

On successful completion of this project, you will be able to reduce the size of the Dockerfile, shorten the time it takes to write a Dockerfile. Also, you will learn to correctly setup the base system and reduce the amount of time it takes to run docker build and the download time.

[Check Source Code](#)

### **3. CI/CD Pipeline using Azure**

You'll use Azure DevOps Project to set up continuous delivery (CD) and continuous integration (CI) pipelines in this project. You may get started by using the provided code. The purpose is to quickly deploy an app to a variety of Azure services, including App Service, Virtual Machines, and Azure Kubernetes Services (AKS).

In this project, you'll use Azure's DevOps Starter feature to establish an ASP.NET sample code, explore the CI/CD pipelines configured by DevOps Starter, commit code changes and run CI/CD, and configure Azure Application Insights monitoring.

[Check Source Code](#)

### **4. Jenkins Remoting Project**

Jenkins Remoting is a library and archive for creating a communication layer. TCP protocols, data streaming, procedure calls, and other features are all included.

In this project, you will have to improve Jenkins Remoting, a communication layer implementation library. Jenkins Remoting can be made compatible with a bus technology like ActiveMQ or RabbitMQ. You'll need knowledge of networking fundamentals, Java, and message queues to execute the task.

[Check Source Code](#)

## 5. CD Pipeline using AWS

You will develop a continuous delivery pipeline for a small web application in this project. To store your source code, you'll first use a version control system.

Then you'll learn how to set up a continuous delivery pipeline that will deploy your web application automatically anytime your source code is updated. This project uses GitHub, AWS Elastic Beanstalk, AWS CodeBuild, and AWS CodePipeline.

[Check Source Code](#)