

## Experiment - 11

Creating Release Pipelines : Deploying Applications to Azure App Services, Managing Secrets and Configuration with Azure Key Vault, Hands-on: Continuous Deployment with Azure Pipelines.

Step 1: Download and extract the Spring Boot application from the following link:  
<https://drive.google.com/file/d/1Te3FJFm30A3D8sbG13QYqkRWmx4PFxd3U/view?usp=sharing>

Step 2: Open the extracted file in IntelliJ idea and run the Spring Boot application.

Step 3: Open the browser and verify the application by visiting:

<http://localhost:8080/api/data>  
 observe the extracted output.

Step 4: Stop the application after successful verification.

Step 5: Create a new Github repository and push the Spring Boot Project code into it.

Step 6: Go to your Github account and create a new repository (make it public).

- Copy the HTTPS clone URL.
- on your local machine, navigate the Project directory using terminal or Git Bash.
- Run the following Git commands:

```
git init
git remote add origin <your-repository - URL>
git add
git commit -m "Initial commit"
git branch -M main
git push -u origin main
```

Step 7: Deploy to Azure:

- Login to Azure Portal
- Go to App services and create a new Web App.
- Provide a name, select Java 17, choose Linux Hosting Plan
- Enable Continuous Deployment and link your Github repository.
- Choose the organisation, repository and the main branch.
- Enable basic Authentication, click Review + Create, then create.
- After deployment, go to the resource and copy the default domain link.

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- Paste the domain URL in the browser and verify output.

Step 8: Configure GitHub Actions for CI/CD:

- In your GitHub repository, go to the Actions tab.
- Create a new workflow file in  
 .github/workflows/main-SJBIT-CSE-test.yml
- Paste the given code in GitHub Action YAML code.

\* Note: Make sure your Azure credentials (Client-id, Tenant-id, subscription-id) are added to your GitHub secrets.