

Name-Anant Srivastava

Reg-240958248

CSFT

Roll-68

Aim

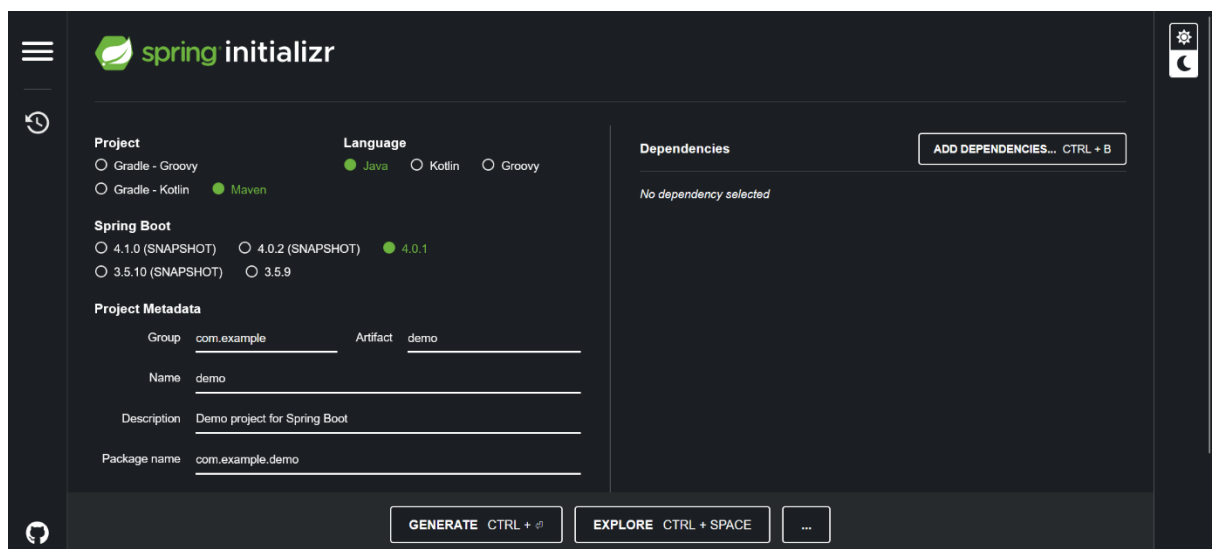
To create a Spring Boot REST API, manage the project using Maven and Git, and deploy the application on Azure Cloud.

Software Requirements

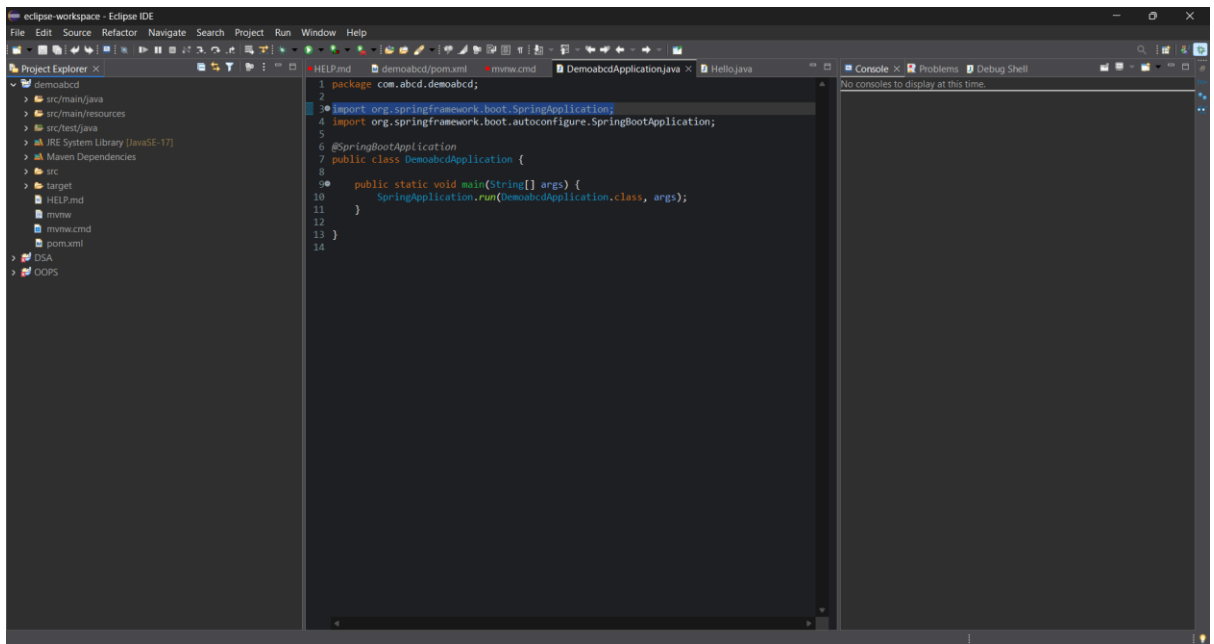
Java (JDK 17), Maven, Eclipse IDE, Git, GitHub, Azure Cloud Shell, MySQL, Postman.

Procedure

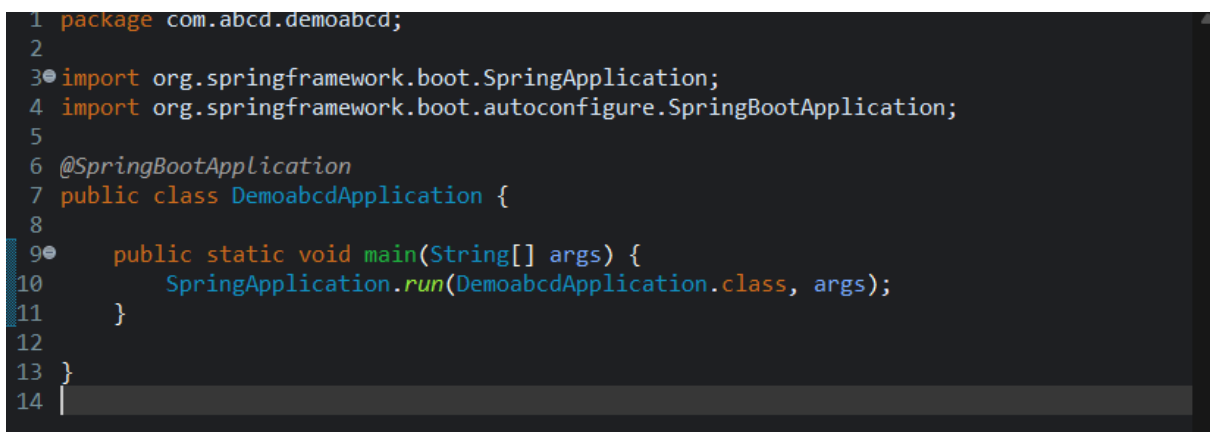
1. Create a Spring Boot project using **Spring Initializr** with Maven and Spring Web dependency.



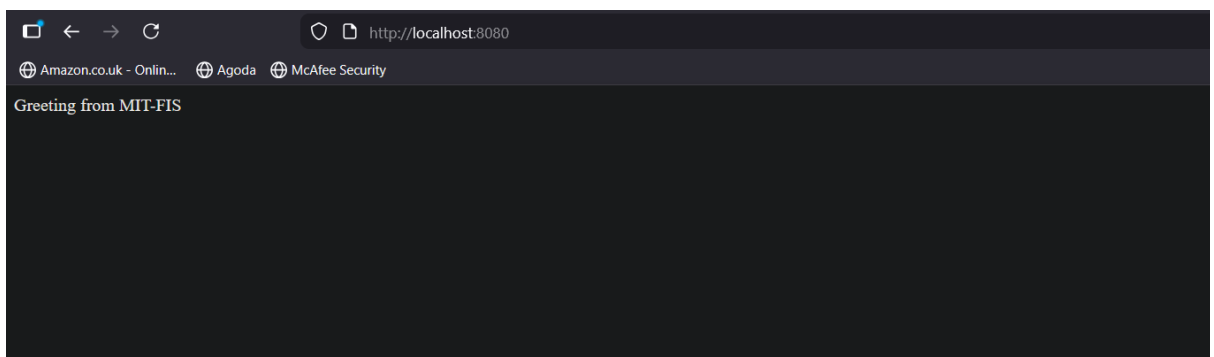
2. Import the project into **Eclipse IDE**.



3. Write a simple REST controller using `@RestController` and `@GetMapping`.



4. Run the application locally on port 8080.



5. Initialize Git, commit the project, and push it to GitHub.

```

PS C:\Users\hp\Downloads\demoabcd> git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
PS C:\Users\hp\Downloads\demoabcd> |

```

```

PS C:\Users\hp\Downloads\demoabcd> git log
commit dc355f3d109e30472369a47a6ce1c60a1ef79fa4 (HEAD -> main, origin/main)
Author: Anant Srivastava <anant1.mitmpl2024@learner.manipal.edu>
Date:   Fri Jan 16 09:45:15 2026 +0530

    updated for submission

commit deed21ecce7facab602c80f05569290587f5109e
Author: Anant Srivastava <anant1.mitmpl2024@learner.manipal.edu>
Date:   Fri Jan 9 09:21:26 2026 +0530

    Hello

```

6. Open Azure Cloud Shell, clone the GitHub repository.

```

anant [ ~ ]$ git clone https://github.com/Anxnt111/Demoabcd.git mywebapp
Cloning into 'mywebapp'...
remote: Enumerating objects: 29, done.
remote: Counting objects: 100% (29/29), done.
remote: Compressing objects: 100% (17/17), done.
remote: Total 29 (delta 2), reused 29 (delta 2), pack-reused 0 (from 0)
Receiving objects: 100% (29/29), 10.40 KiB | 5.20 MiB/s, done.
Resolving deltas: 100% (2/2), done.
anant [ ~ ]$ cd mywebapp
anant [ ~/mywebapp ]$ mvn com.microsoft.azure:azure-webapp-maven-plugin:2.13.0:config
[INFO] Scanning for projects...
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-starter-parent/3.2.5/spring-boot-starter-parent-3.2.5.pom (13 kB at 25 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-starter-parent/3.2.5/spring-boot-starter-parent-3.2.5.pom (13 kB at 25 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-dependencies/3.2.5/spring-boot-dependencies-3.2.5.pom (111 kB at 1.5 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-dependencies/3.2.5/spring-boot-dependencies-3.2.5.pom (111 kB at 1.5 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/assertj/assertj-bom/3.24.2/assertj-bom-3.24.2.pom (3.7 kB at 28 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/assertj/assertj-bom/3.24.2/assertj-bom-3.24.2.pom (3.7 kB at 28 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/io/zipkin/brave/brave-bom/5.16.0/brave-bom-5.16.0.pom (12 kB at 358 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/io/zipkin/brave/brave-bom/5.16.0/brave-bom-5.16.0.pom (12 kB at 358 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/io/zipkin/reporter2/zipkin-reporter-bom/2.16.3/zipkin-reporter-bom-2.16.3.pom (6.9 kB at 140 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/io/zipkin/reporter2/zipkin-reporter-bom/2.16.3/zipkin-reporter-bom-2.16.3.pom (6.9 kB at 140 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/datastax/oss/java-driver-bom/4.17.0/java-driver-bom-4.17.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/spring-framework-bom/6.1.6/spring-framework-bom-6.1.6.pom (5.8 kB at 197 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/integration/spring-integration-bom/6.2.4/spring-integration-bom-6.2.4.pom (10 kB at 308 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/integration/spring-integration-bom/6.2.4/spring-integration-bom-6.2.4.pom (10 kB at 308 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/pulsar/spring-pulsar-bom/1.0.5/spring-pulsar-bom-1.0.5.pom (2.7 kB at 55 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/pulsar/spring-pulsar-bom/1.0.5/spring-pulsar-bom-1.0.5.pom (2.7 kB at 55 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/restdocs/spring-restdocs-bom/3.0.1/spring-restdocs-bom-3.0.1.pom (2.6 kB at 74 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/restdocs/spring-restdocs-bom/3.0.1/spring-restdocs-bom-3.0.1.pom (2.6 kB at 74 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/security/spring-security-bom/6.2.4/spring-security-bom-6.2.4.pom (5.3 kB at 167 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/security/spring-security-bom/6.2.4/spring-security-bom-6.2.4.pom (5.3 kB at 167 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/session/spring-session-bom/3.2.2/spring-session-bom-3.2.2.pom (2.9 kB at 93 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/session/spring-session-bom/3.2.2/spring-session-bom-3.2.2.pom (2.9 kB at 93 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/ws/spring-ws-bom/4.0.10/spring-ws-bom-4.0.10.pom (3.5 kB at 103 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/ws/spring-ws-bom/4.0.10/spring-ws-bom-4.0.10.pom (3.5 kB at 103 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/testcontainers/testcontainers-bom/1.19.7/testcontainers-bom-1.19.7.pom (10 kB at 347 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/testcontainers/testcontainers-bom/1.19.7/testcontainers-bom-1.19.7.pom (10 kB at 347 kB/s)
[INFO] -----< com.abcd:demoabcd >-----
[INFO] Building demoabcd 0.0.1-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- azure-webapp:2.13.0:config (default-cli) @ demoabcd ---
Please choose which part to config [Application]:
* 1: Application
  2: Runtime
  3: DeploymentSlot
Enter your choice: |

```

7. Configure Azure Web App using Maven plugin.

```

Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-shade-plugin/3.5.0/maven-shade-plugin-3.5.0.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-loader-tools/3.2.5/spring-boot-loader-tools-3.2.5.jar (435 kB at 2.9 MB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm/9.5/asm-9.5.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/httpcomponents/core5/httpcore5/5.2.4/httpcore5-5.2.4.jar (855 kB at 5.0 MB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm-commons/9.5/asm-commons-9.5.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm/9.5/asm-9.5.jar (122 kB at 685 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm-tree/9.5/asm-tree-9.5.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-shade-plugin/3.5.0/maven-shade-plugin-3.5.0.jar (147 kB at 810 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-dependency-tree/3.2.1/maven-dependency-tree-3.2.1.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/1.5.8/plexus-utils-1.5.8.jar (268 kB at 1.5 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/commons-io/commons-io/2.13.0/commons-io-2.13.0.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm-commons/9.5/asm-commons-9.5.jar (72 kB at 361 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm-tree/9.5/asm-tree-9.5.jar (52 kB at 245 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-dependency-tree/3.2.1/maven-dependency-tree-3.2.1.jar (43 kB at 195 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/commons-io/commons-io/2.13.0/commons-io-2.13.0.jar (484 kB at 2.2 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/net/java/dev/jna/jna-platform/5.13.0/jna-platform-5.13.0.jar (1.4 MB at 5.5 MB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm-commons/9.5/asm-commons-9.5.jar (72 kB at 361 kB/s)
[INFO] Replacing main artifact /home/anant/mywebapp/target/demoabcd-0.0.1-SNAPSHOT.jar with repackaged archive, adding nested dependencies in BOOT-INF/.
[INFO] The original artifact has been renamed to /home/anant/mywebapp/target/demoabcd-0.0.1-SNAPSHOT.jar.original
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 23.177 s
[INFO] Finished at: 2026-01-16T04:34:15Z
[INFO] -----
anant [ ~/mywebapp ]$

```

```

[INFO] Scanning for projects...
[INFO] -----< com.abcd:demoabcd >-----
[INFO] Building demoabcd 0.0.1-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO] --- azure-webapp:2.13.0:deploy (default-cli) @ demoabcd ---
[INFO] Auth type: MANAGED_IDENTITY
[INFO] Username: 04b07795-8ddb-461a-bbee-02f9e1bf7b46
[INFO] Subscription: Azure for Students(e320a7a1-ea14-45b8-977d-b64406e5a98b)
[INFO] Start creating Resource Group(demoabcd-centralindia-rg) in region (Central India)...
[INFO] Resource Group(demoabcd-centralindia-rg) is successfully created.
[INFO] Start creating App Service plan (asp-demoabcd-centralindia)...
[INFO] App Service plan (asp-demoabcd-centralindia) is successfully created
[INFO] Start creating Web App(demoabcd-anant-ci)...
[INFO] Web App(demoabcd-anant-ci) is successfully created
[INFO] Trying to deploy external resources to demoabcd-anant-ci...
[INFO] Successfully deployed the resources to demoabcd-anant-ci
[INFO] Trying to deploy artifact to demoabcd-anant-ci...
[INFO] Application url: https://demoabcd-anant-ci.azurewebsites.net
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 55.897 s
[INFO] Finished at: 2026-01-16T04:35:55Z
[INFO] -----
anant [ ~/mywebapp ]$

```

8. Build and deploy the application to Azure.

The screenshot shows a web browser window displaying the Microsoft Azure portal. The browser's address bar shows the URL: `portal.azure.com/#@manipal.edu/resource/subscriptions/e320a7a1-ea14-45b8-977d-b64406e5a98b/resourceGroups/fiel...`. The browser's search bar contains the text "fidelityinformationsystem". The browser's address bar also shows the user's email address: "anant1.mitmpl2024@le...".

The browser window displays the "fidelityinformationsystem" Web App. The terminal window shows the deployment process for the application to Azure. The terminal output is as follows:

```

[INFO] Scanning for projects...
[INFO] -----< com.abcd:demoabcd >-----
[INFO] Building demoabcd 0.0.1-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO] --- azure-webapp:2.13.0:deploy (default-cli) @ demoabcd ---
[INFO] Auth type: MANAGED_IDENTITY
[INFO] Username: 04b07795-8ddb-461a-bbee-02f9e1bf7b46
[INFO] Subscription: Azure for Students(e320a7a1-ea14-45b8-977d-b64406e5a98b)
[INFO] Start creating Resource Group(demoabcd-centralindia-rg) in region (Central India)...
[INFO] Resource Group(demoabcd-centralindia-rg) is successfully created.
[INFO] Start creating App Service plan (asp-demoabcd-centralindia)...
[INFO] App Service plan (asp-demoabcd-centralindia) is successfully created
[INFO] Start creating Web App(demoabcd-anant-ci)...
[INFO] Web App(demoabcd-anant-ci) is successfully created
[INFO] Trying to deploy external resources to demoabcd-anant-ci...
[INFO] Successfully deployed the resources to demoabcd-anant-ci
[INFO] Trying to deploy artifact to demoabcd-anant-ci...
[INFO] Application url: https://demoabcd-anant-ci.azurewebsites.net
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 55.897 s
[INFO] Finished at: 2026-01-16T04:35:55Z
[INFO] -----
anant [ ~/mywebapp ]$

```

The terminal window also shows a "Snipping Tool" notification: "Screenshot copied to clipboard. Automatically saved to screenshots folder. Mark-up and share".

Microsoft Azure portal showing the configuration for the **fieldityinformationsystem** Web App.

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Microsoft Defender for Cloud
- Events (preview)
- Log stream
- Resource visualizer
- Deployment
- Settings
- Performance
- App Service plan
- Development Tools
- API
- Monitoring

Essentials

Property	Value
Resource group (move)	fieldityinformationsystem_group
Status	Running
Location (move)	Central India
Subscription (move)	Azure for Students
Subscription ID	e320a7a1-ea14-45b8-977d-b64406e5a98b
Tags (edit)	Add tags

Properties

Property	Value
Name	fieldityinformationsystem
Publishing model	Code
Runtime Stack	Java 17 SE
Runtime status	Healthy

Domains

Property	Value
Default domain	fieldityinformationsystem-bvarh8bzcbcd9e3.centralindia-01.azurewebsites.net

Deployment Center

Property	Value
Deployment logs	View logs
Last deployment	Loading deployments...
Deployment provider	None

Application Insights

Property	Value
Name	fieldityinformationsystem
Region	Central India

Web browser showing the URL **fieldityinformationsystem-bvarh8bzcbcd9e3.centralindia-01.azurewebsites.net**.

Greeting from MIT-FIS

27°C Sunny

Search

ENG IN

10:08 16-01-2026