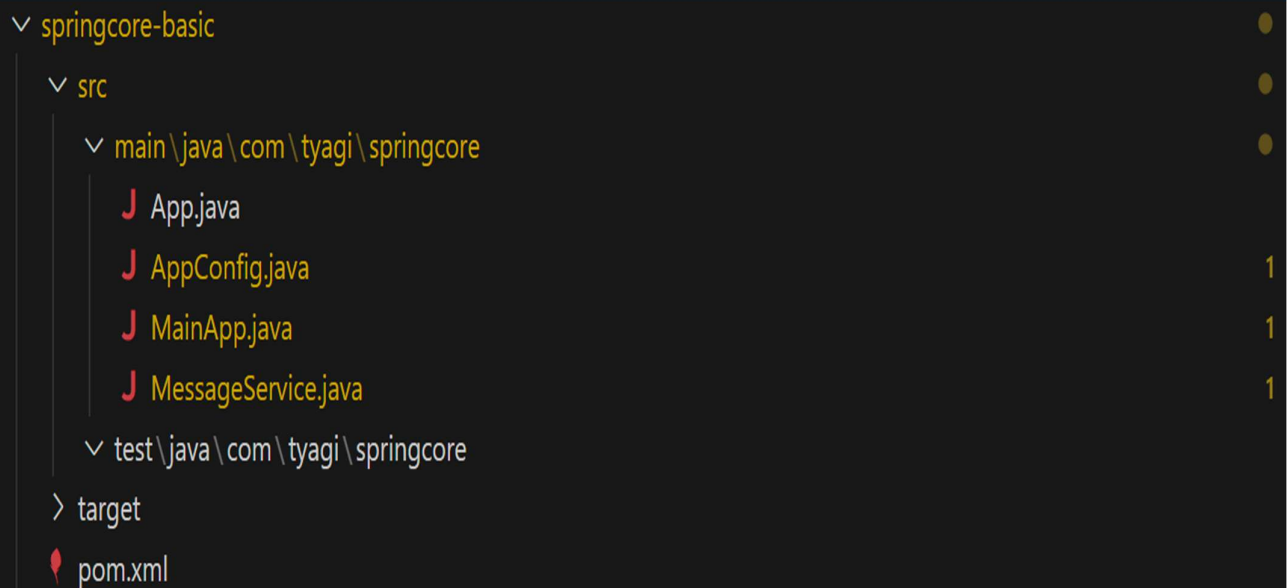Week3_1_Spring Core and Maven_Exercise1_Configuring a Basic Spring Application

Creating Project:

```
/maven-archetype-quickstart-1.0.jar (4.3 kB at 123 kB/s)
[INFO] ------------------------------------------------------------------------
[INFO] Using following parameters for creating project from Old (1.x) Archetype: maven-archetype-quickstart:1.0
[INFO] ------------------------------------------------------------------------
[INFO] Parameter: basedir, Value: C:\Users\veert\OneDrive\Desktop\JUnit
[INFO] Parameter: package, Value: com.tyagi.springcore
[INFO] Parameter: groupId, Value: com.tyagi.springcore
[INFO] Parameter: artifactId, Value: springcore-basic
[INFO] Parameter: packageName, Value: com.tyagi.springcore
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] project created from Old (1.x) Archetype in dir: C:\Users\veert\OneDrive\Desktop\JUnit\springcore-basic
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  11.500 s
[INFO] Finished at: 2025-07-03T21:42:42+05:30
[INFO] ------------------------------------------------------------------------

C:\Users\veert\OneDrive\Desktop\JUnit>
```

Folder Structure:

```
∨ springcore-basic
   ∨ src
      ∨ main\java\com\tyagi\springcore
         J App.java
         J AppConfig.java                1
         J MainApp.java                  1
         J MessageService.java           1
      ∨ test\java\com\tyagi\springcore
   > target
   ● pom.xml
```

Pom.xml

```xml
1   <project xmlns="http://maven.apache.org/POM/4.0.0"
2            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3            xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
4            http://maven.apache.org/xsd/maven-4.0.0.xsd">
5     <modelVersion>4.0.0</modelVersion>
6     <groupId>com.tyagi.springcore</groupId>
7     <artifactId>springcore-basic</artifactId>
8     <version>1.0-SNAPSHOT</version>
9
10    <dependencies>
11      <dependency>
12        <groupId>org.springframework</groupId>
13        <artifactId>spring-context</artifactId>
14        <version>5.3.22</version>
15      </dependency>
16    </dependencies>
17    <build>
18      <plugins>
19        <plugin>
20          <groupId>org.codehaus.mojo</groupId>
21          <artifactId>exec-maven-plugin</artifactId>
22          <version>3.1.0</version>
23          <configuration>
24            <mainClass>com.tyagi.springcore.MainApp</mainClass>
25          </configuration>
26        </plugin>
27      </plugins>
28    </build>
29  </project>
30
```

AppConfig.java

```java
1   package com.tyagi.springcore;
2
3   import org.springframework.context.annotation.Bean;
4   import org.springframework.context.annotation.Configuration;
5
6   @Configuration
7   public class AppConfig {
8       @Bean
9       public MessageService messageService() {
10          return new MessageService();
11      }
12  }
```

MessageService.java

```
springcore-basic > src > main > java > com > tyagi > springcore > J MessageService.java > ...
1    package com.tyagi.springcore;
2
3    public class MessageService {
4        public void printMessage() {
5            System.out.println(x:"Spring Core Basic Application Running!");
6        }
7    }
8
```

MainApp.java

```
springcore-basic > src > main > java > com > tyagi > springcore > J MainApp.java > MainApp
1     package com.tyagi.springcore;
2
3     import org.springframework.context.ApplicationContext;
4     import org.springframework.context.annotation.AnnotationConfigApplicationContext;
5
6     public class MainApp {
      Run | Debug
7         public static void main(String[] args) {
8             ApplicationContext context = new AnnotationConfigApplicationContext(AppConfig.class);
9             MessageService ms = context.getBean(MessageService.class);
10            ms.printMessage();
11        }
12    }
13
```

Output

```
[INFO] --- exec:3.1.0:java (default-cli) @ springcore-basic ---
Spring Core Basic Application Running!
[INFO] ------------------------------------------------------------------------
[INFO]
[INFO] --- exec:3.1.0:java (default-cli) @ springcore-basic ---
Spring Core Basic Application Running!
[INFO] ------------------------------------------------------------------------
[INFO] --- exec:3.1.0:java (default-cli) @ springcore-basic ---
Spring Core Basic Application Running!
[INFO] ------------------------------------------------------------------------
Spring Core Basic Application Running!
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  0.625 s
[INFO] Finished at: 2025-07-03T22:01:42+05:30
[INFO] ------------------------------------------------------------------------

C:\Users\veert\OneDrive\Desktop\JUnit\springcore-basic>
```