

BattleShip Project Documentation

1 Environment

Code and scripts are tested under the following settings.

1.1 Linux

1.1.1 Distribution

NixOS <https://nixos.org>

```
$ uname -a
```

```
Linux home-thinkcenter 5.4.90 #1-NixOS SMP Sun Jan 17 13:05:38 UTC 2021 x86_64 GNU/Linux
```

1.1.2 JDK

1.1.3 Nix

If you have Nix installed, you may use `nix-shell` and it will set up the development environment for you.

1.2 Windows

VirtualBox (Oracle VM VirtualBox VM Runner v6.1.16) is used.

<https://modern.ie> Image from <https://developer.microsoft.com/en-us/microsoft-edge/tools/vms/>

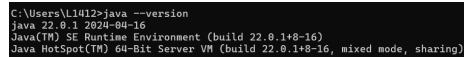
1.2.1 Distribution

1.2.2 JDK

```
PS C:\Users\IEUser> javac --version
```

```
javac 15.0.2
```

```
PS C:\Users\IEUser> java --version
```



```
C:\Users\L1412>java --version
java 22.0.1 2824-b04-16
Java(TM) SE Runtime Environment (build 22.0.1+8-16)
Java HotSpot(TM) 64-Bit Server VM (build 22.0.1+8-16, mixed mode, sharing)
```

Figure 1: Java Version check

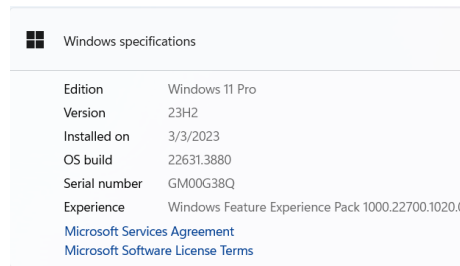


Figure 2: Windows Distribution

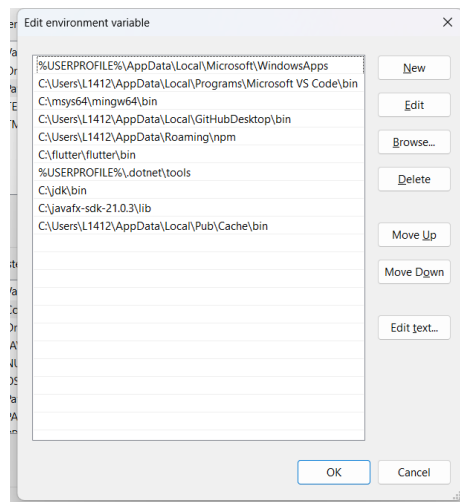


Figure 3: Environmental Variables

```
java 15.0.2 2021-01-19
Java(TM) SE Runtime Environment (build 15.0.2+7-27)
Java HotSpot(TM) 64-Bit Server VM (build 15.0.2+7-27, mixed mode, sharing)
```

1.2.3 Note for javadoc

By default, installation from Java won't add javadoc to path. Please add Java bin path to Control Panel -> System and Security -> System -> Advanced System Settings -> Environment Variables -> Path with your install path so the script can work properly.

2 Usage

The following commands are executed under the project root directory.

2.1 Linux

2.1.1 Compile

```
sh scripts/compile.sh
```

2.1.2 Run

```
sh scripts/run.sh
```

2.2 Windows

Open PowerShell and navigate to the project root directory.

2.2.1 Compile

```
.\scripts\compile.cmd
```

2.2.2 Run

```
.\scripts\run.cmd
```

3 Others

3.1 manuals/

Program usages and test explanations.

3.1.1 compile-pdf.sh

Compile .md files into .pdf. `pandoc` is used.

3.2 lib/

Dependencies (jars) such as JUnit for a consistent environment.