

Hello Hackathon Participants!!

We are very excited to see/meet all of you next week! Connor, Halle, and I just wanted to reach out to send you all some background information and optional training materials prior to the launch of the event.

The event, itself, will begin on Friday, January 17th at 4pm with an hour for getting everything set up and networking. The opening remarks will begin around 5pm. We will have dinner provided on Friday and you will also have some time to begin working in your teams. The official end time on Friday will be 8pm but feel free to continue working. Saturday we will begin with breakfast at 8am and you will have most of the day to work with your team. Lunch will be provided Saturday as well. The event will end Saturday at 5pm after presentations and announcing of winners. There will be guest speakers from GE at the opening and closing as well.

If you have any questions regarding the event itself or any of the material listed below please don't hesitate to reach out to myself (Catherine.Schwegman@ge.com), Connor (Connor.Kunstek@ge.com) and Halle (Halle.Dymowski@ge.com).

Software Needed:

Java JDK – Recommend versions 1.8 or 1.11

- Windows
 - Oracle JDK: <https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>
 - Add JAVA to your PATH environment variable - Guide: https://www.mkyong.com/java/how-to-set-java_home-on-windows-10/
 - (Optional) Endpoint Testing - *This tool is used to test Java Springboot APIs*
 - Postman: <https://www.getpostman.com/download>
- Mac
 - Homebrew - Homebrew is a Mac package manager that makes installing development software on Macs easier - the below installation steps are recommended vs traditional installation
 - Homebrew: <https://brew.sh/>
 - Java: If you want to install Java via Homebrew, open your terminal, and enter the following commands (Otherwise, it can be installed traditionally in the Java Section below)
 - ``brew tap caskroom/versions`` if this throws an error, you can also do ``brew tap homebrew/cask-versions``
 - ``brew cask install caskroom/versions/adoptopenjdk8`` (to install OpenJDK). If first step didn't work, you can do ``brew cask install adoptopenjdk8`` or ``brew cask install cask-versions/adoptopenjdk8``
 - ``brew cask install java8`` (to install Oracle JDK. Do not install this if you installed OpenJDK above)
 - Maven: If you want to install Maven via Homebrew, open your terminal, and enter the following command (Otherwise, it can be installed traditionally in the Maven Section below)
 - ``brew install maven``
 - Or traditional installation

- Oracle JDK: <https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>
- Maven: <https://maven.apache.org/download.cgi>
- (Optional) Endpoint Testing - *This tool is used to test Java Springboot APIs*
 - Postman: https://www.getpostman.com/download?platform=mac&utm_source=site&utm_medium=apps&utm_campaign=macapp

Useful Material/Technologies to Know

- Importing Your Project into IntelliJ
 - Open IntelliJ
 - Click Import Project
 - Browse to your workspace folder and select the folder containing the project
 - Click Open
 - Select Maven and click Next
 - Check Search for projects recursively
 - Check Import Maven projects automatically
 - Click Next
 - Click Next
 - Click Select All button to include all Maven projects
 - Click Next
 - Verify that the 1.8 SDK (or your version of Java) is selected and that the JDK home path are the same as what was installed during the above software installation
 - Click Next
 - Verify the Project name and Project file location and click Next
 - Click Run>Edit Configurations
 - Click the plus above Templates
 - Select JAR Application
 - Put <SERVICE NAME> in the name text box
 - Click the folder inside Path to Jar
 - Select target> <SERVICE>-0.0.#.jar
 - Click Open
 - Select 1.8 (or your Java version) from the JRE drop-down
 - Click OK
 - Click Run>Run> <SERVICE>
 - Browse to <http://localhost:8080>
- Example Maven project:
 - <https://maven.apache.org/guides/getting-started/maven-in-five-minutes.html>
- RESTful Web Application Example:
 - <https://www.guru99.com/restful-web-services.html>
- JavaScript/HTML
- Java/Spring
 - Spring Example: <https://spring.io/guides/gs/serving-web-content/>
 - Spring with Maven Example: <https://spring.io/guides/gs/maven/>
- Most common web application vulnerabilities (Google it)
- not required but an optional features to add to your application
 - AWS
 - Databases
 - JavaScript frameworks (React, Vue, etc.)