# Purpose

You will use the **Assignment Submission** mechanism to keep us up-to-date with your lab project throughout the course. The mechanism is implemented as a Gradle plugin.

[Gradle](https://gradle.org/) is a dependency management and build tool popular in Java and Android development, but we will be using it mostly to submit assignments.

Many labs will require you to run a Gradle [task](https://docs.gradle.org/current/dsl/org.gradle.api.Task.html) at the end to signify that you are done with the lab and ready to move on.

# Discussion points

* What is Gradle and why are we using it.
* Get your Cohort ID from your instructors.
* We will submit assignments for each lab.

# Setup

1. Create a workspace directory.

Run the following to create your workspace:

mkdir -p ~/workspace

1. Clone the assignment-submission repository into your workspace directory:
2. **cd** ~/workspace
3. git **clone** https://github.com/platform-acceleration-lab/assignment-submission-dotnet.git assignment-submission
4. Navigate into the assignment-submission directory.
5. **cd** assignment-submission
6. In the build.gradle file, replace the example emails with your own and that of your pair. **These emails should be the same ones you gave us in your PAL survey.** If working by yourself, simply delete the other address from the emailsarray.
7. Still in build.gradle, replace **999999** with the cohort identifier provided by your instructor.

# List assignments

Each assignment has its own Gradle task for submission. View a list of all assignments by running the following command from the root of the assignment-submission directory.

./gradlew tasks

# Submit an assignment

To ensure everything is working correctly we will submit a test assignment.

1. Give it a try by running:
2. ./gradlew testAssignment

You will see an error similar to the following:

:testAssignment FAILED

FAILURE: Build failed with an exception.

\* What went wrong:

Execution failed for task ':testAssignment'.

> Need project property `exampleUrl`, use command line argument "-PexampleUrl=someValue"

\* Try:

Run with --stacktrace option to get the stack trace. Run with --info or --debug option to get more log output.

BUILD FAILED

We see this error because we are missing necessary lab configuration (an exampleUrl in this case) for this assignment.

1. Try again with the exampleUrl project property correctly set:
2. ./gradlew testAssignment -PexampleUrl=http://www.example.com

You will see the following output, which signifies a successfully submitted assignment.

:testAssignment

BUILD SUCCESSFUL

# Debugging Failures

Many of the assignment tasks run a smoke test against your application on CF. If you get an error, the task will output a standard test assertion failure message. Use this message to fix the issue, then re-deploy your application and try again.

An assignment is only considered successful when the task outputs:

BUILD SUCCESSFUL