MindMath LIP6 Server Manuel

Editor: Yan Wang

Last Modified Date: 10/08/2020

**For the continuous development of MindMath LIP6 server, we need to follow the steps below to construct the IDE:**

1. **Install Java.**
2. **Install Git.**
3. **Install Eclipse (or Visual Studio Code if you want).**
4. **Clone the project into the local machine with Git.**
5. **Switch the branch for production and development.**
6. **Import Gradle project with Eclipse.**
7. **Install dependencies via Gradle.**
8. **Run the server at localhost.**
9. **Generate war file and deploy with Docker.**
10. **Unit Test (optional).**

**At last, we will present the main APIs of MindMath LIP6 server.**

## ****Install Java****

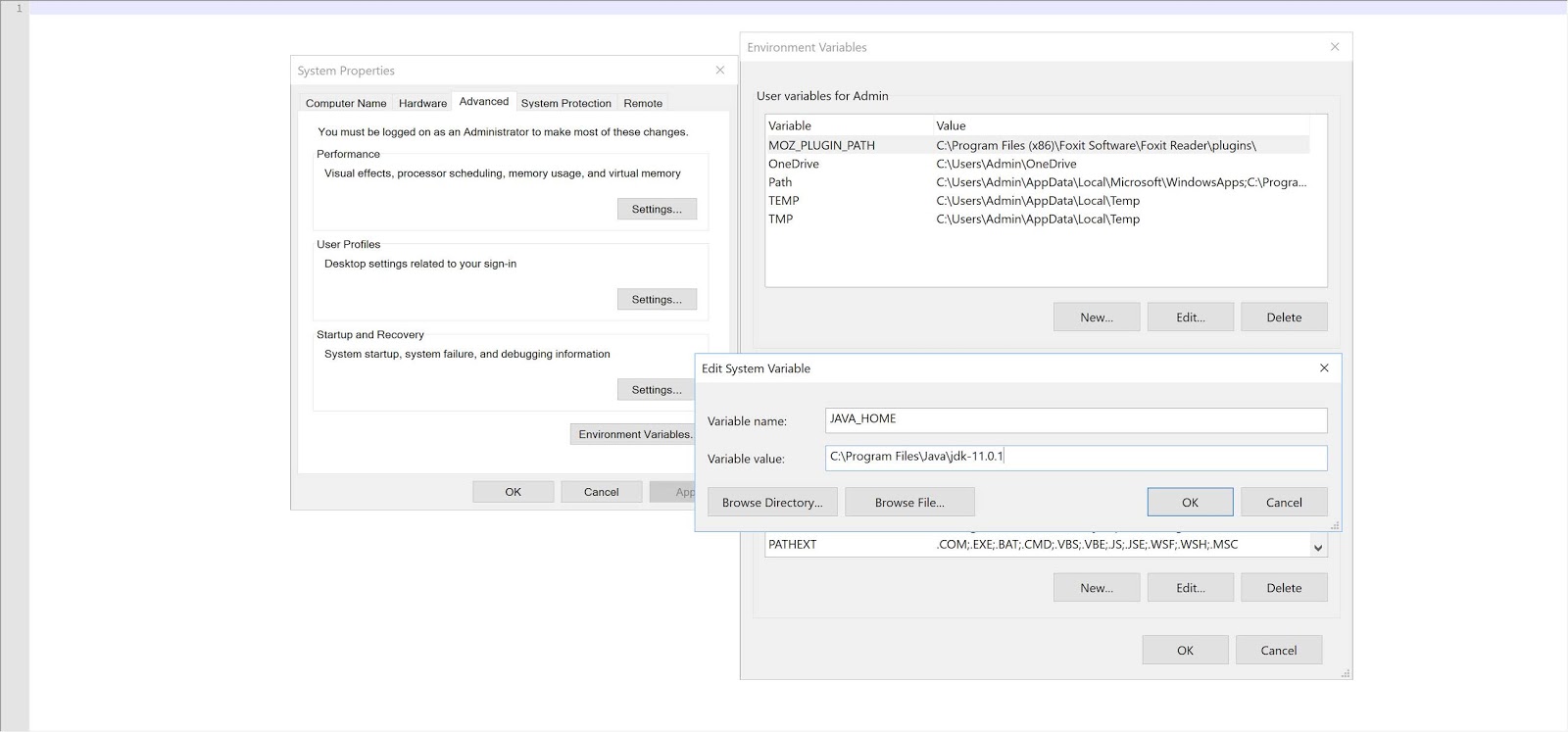
The current version of Java is 11+.

For windows:

You can download JDK11 through <https://www.oracle.com/java/technologies/javase-jdk11-downloads.html>

Then you need to set environment variable in Windows.

* Locate Java installation directory
* Do one of the following:
  + Windows 7 – Right click **My Computer** and select **Properties > Advanced**
  + Windows 8 – Go to **Control Panel > System > Advanced System Settings**
  + Windows 10 – Search for **Environment Variables** then select **Edit the system environment variables**
* Click the **Environment Variables** button
* Under **System Variables**, click **New**
* In the **Variable Name** field, enter *JAVA\_HOME*
* In the **Variable Value** field, enter your JDK installation path
* Choose the **Path** variable, click **Edit**
* In the **Variable** **Value** field, enter *%JAVA\_HOME%\bin* and add it to the end (add ; if there are multiple ones in front)



For Linux:

* Open a terminal window.
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

*sudo apt-get install openjdk-11-jdk*

## Install Git

For Windows:

* Download from the following site:

<http://git-scm.com/download/win>

* Open **Powershell** and verify Git is working

*git --version*

For Linux:

* Open a terminal window.
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

*sudo apt-get install git*

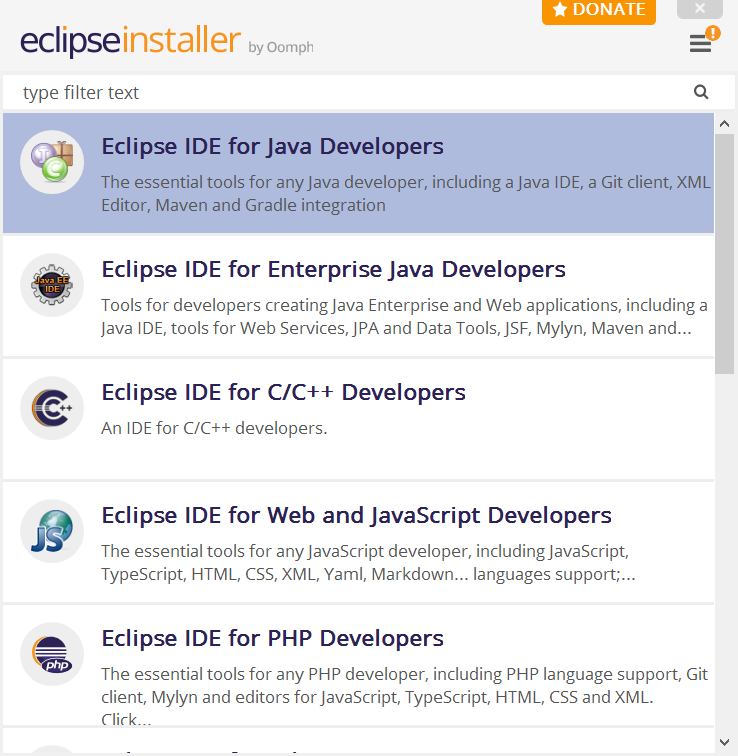
## Install Eclipse

For Windows:

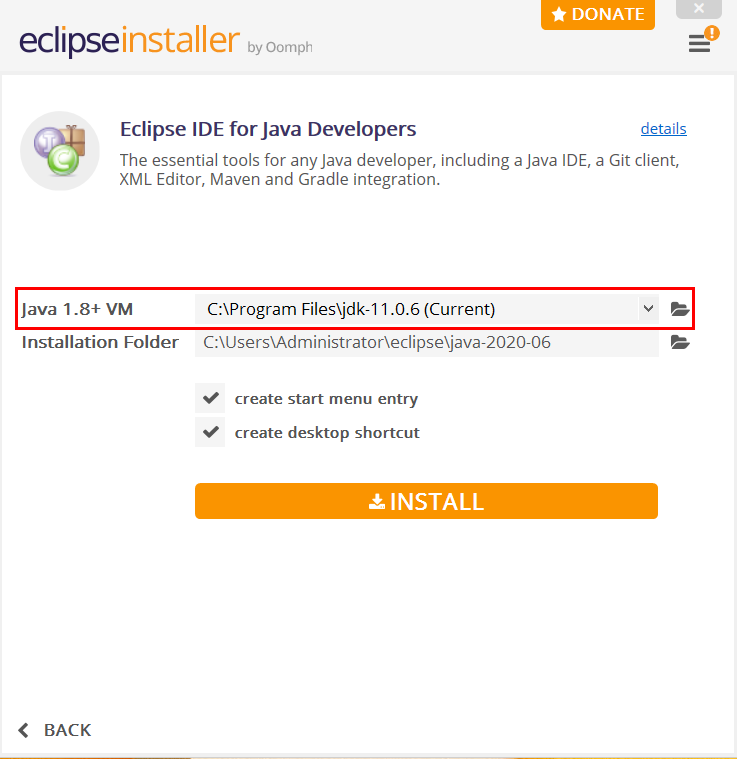
* Download from the following site:

<https://www.eclipse.org/downloads/>

* Choose Eclipse IDE for Java Developers



* Check JDK installation path and install



For Linux:

* Open a terminal window.
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

*sudo snap install --classic eclipse*

For Visual Studio Code:

* Download from the following site:

<https://code.visualstudio.com/Download>

## Clone the project

For Windows:

* Open PowerShell
* Copy & paste the following into the terminal window and hit Enter.

*git clone https://gitlab.lip6.fr/mocah/mindmath.git*

For Linux:

* Open a terminal window.
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

*sudo git clone https://gitlab.lip6.fr/mocah/mindmath.git*

## Switch the branch

For Windows:

* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter.

*git checkout Development*

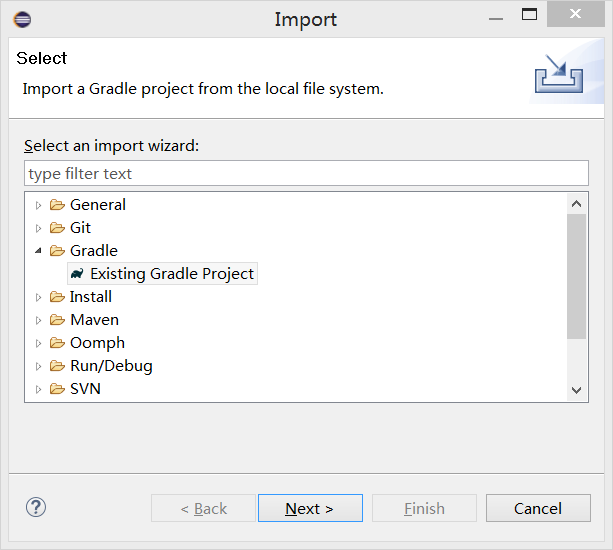
For Linux:

* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

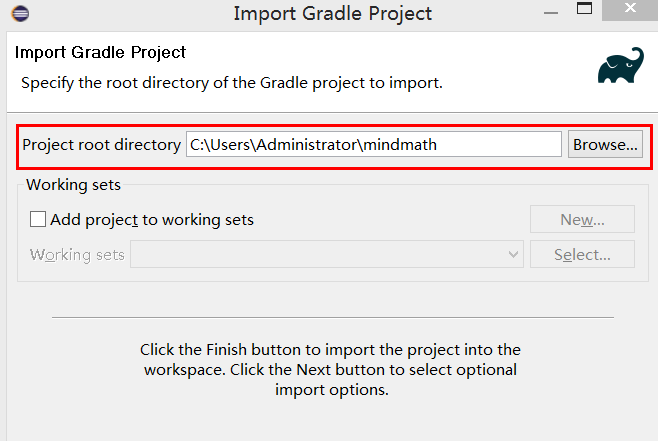
*sudo git checkout Development*

## Import Gradle project with Eclipse

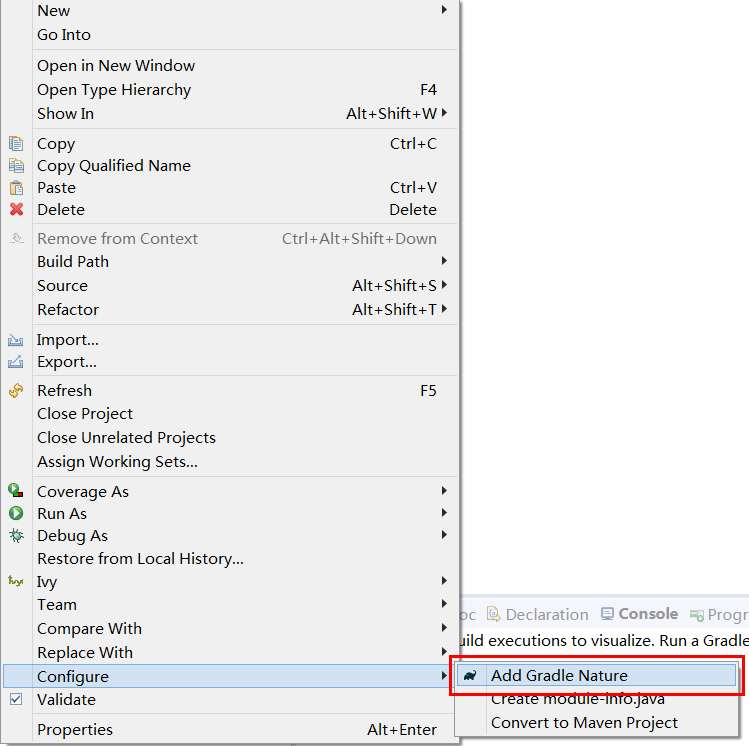
* Open Eclipse
* Click **File** > **Import**, select **Existing Gradle Project**



* Choose the **Project Root Directory** and click **Finish**

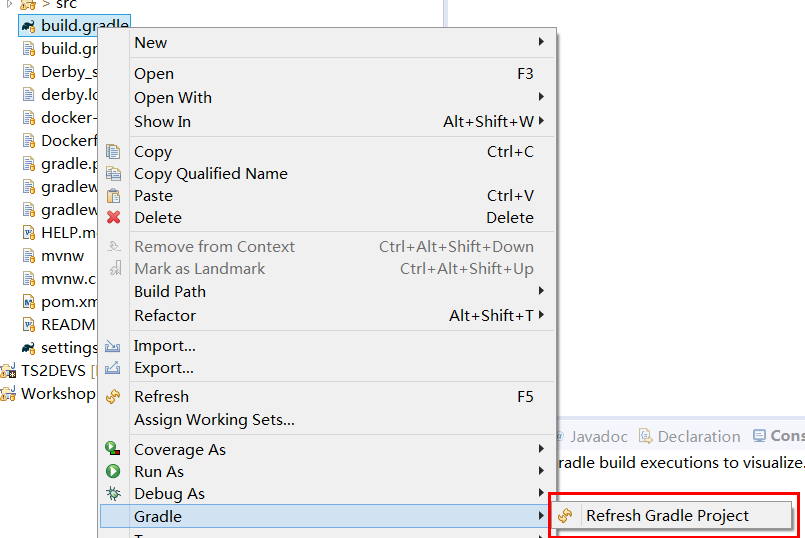


* If the project has already been opened in eclipse, right click the project and choose **Configure** > **Add Gradle Nature**



## Install dependencies via Gradle

Right click the **project** or **build.gradle**, click **Gradle** > **Refresh Gradle Project**



## Run the server at localhost

For Windows:

* Open PowerShell
* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter.

*./gradlew bootRun*

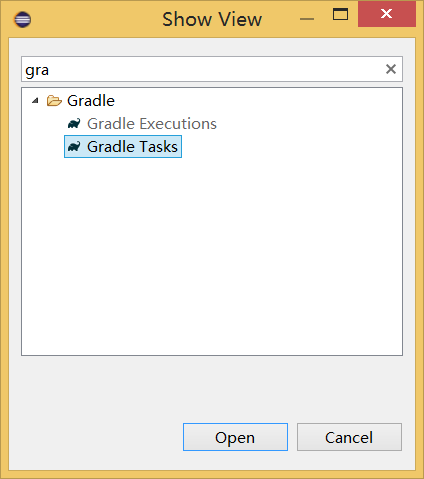
For Linux:

* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

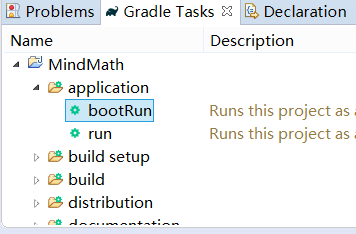
*sudo ./gradlew bootRun*

For Eclipse:

* Open **Gradle Tasks** view. Click **Window** > **Show View** > **Other**, select **Gradle Tasks**.



* Double click **application** > **bootRun**



## Generate WAR file and deploy with Docker

For Windows:

* Open PowerShell
* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter.

*./gradlew bootWar*

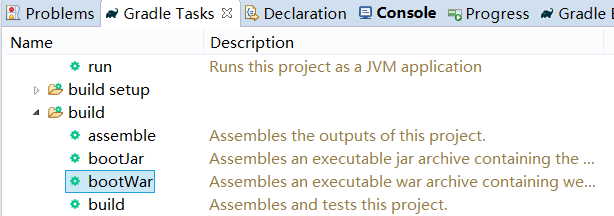
For Linux:

* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

*sudo ./gradlew bootWar*

For Eclipse:

Double click **build** > **bootWar**



The WAR file is in the path ../mindmath/build/libs/MindMath-0.0.2-SNAPSHOT.war

For the docker deployment, please check **README** in <https://gitlab.lip6.fr/mocah/mindmath>

## Unit Test (optional)

For Windows:

* Open PowerShell
* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter.

*./gradlew test*

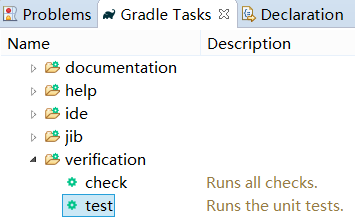
For Linux:

* Go to the root path of the project
* Copy & paste the following into the terminal window and hit Enter. **You may be prompted to enter your password.**

*sudo ./gradlew test*

For Eclipse:

Double click **verification** > **test**



The results are in the path ../mindmath/build/reports/tests/test/index.html

## MindMath LIP6 APIs

All the APIs are presented in <https://mindmath.lip6.fr/swagger-ui.html>.