APPLICATIONS FOR VIRTUAL LABORATORY

Intellectual Output 2 of Science Connect project,

ref.no. 2019-1-RO01-KA201-063169

Help file

For opening and running the simulations made

The applications developed within the Science Connect project, which contain versions in English and in the seven languages of the project partners (Greek, Italian, Latvian, Portuguese, Romanian, Spanish, Turkish), are java applications. They can be downloaded and run, on personal devices under the creative common license.

Depending on the device, it is possible that these applications cannot be run.

The purpose of this document is to provide a way to solve this problem.

The main steps are these

The three applications can be accessed here. You will receive a message "**No preview available**" Click on the "**Download**" button

1 - Each archive is a jar file. You may not see the (**.jar**) extension. No problem. If you want, see the second step in the document to learn how to do it.

Move the downloaded **.jar** archive to desktop or select for download, directly, the Desktop folder.
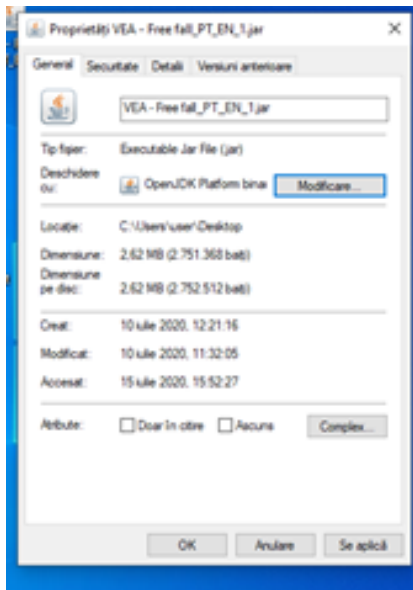
2. Go to https://www.oracle.com/java/technologies/javase-jdk14-downloads.html , select the file that corresponds to your operating system and download it. We installed WINDOWS 10, so we downloaded **jdk-14.0.2_windows-x64_bin.exe** which is an executable file.

After downloading, run the file to install **the Java Developer Kit** (**JDK**). If you have another Java installed on your computer, you may be prompted to create another folder for installation.

3 When the installation is finished, go to your desktop, right-click on the downloaded **.jar** file, select "**Properties"**, then "**Open with...**" and select "**OpenJDK Platform binary**".

If you don't see it in the list, go to "**More apps**" and go to "**Search for another app on your computer**".

Browse to the folder where you installed the JDK (**maybe it's in C/Program Files**), open the bin folder and select **java.exe**. You will see something like this (in the image, it is in Romanian, but something similar may be for you).

You will see the icon change to the icon for Java files, a hot cup. Confirm (**Apply**) and **OK**, then **close the window**.

4. On the Desktop, **right-click** and select **New**, then **Text Document**. Rename it **run.bat** (yes, *change the extension from txt to bat*). You will be asked to confirm that you want to change the extension.

5 **Right-click** the **run.bat** file, select "**Edit**" and paste the following text without modification

      java -jar VEA - Free fall_International.jar or

      java -jar VEA - Forces in linear motion_International.jar or

      java -jar VEA - Braking Distance_International.jar

(select the file you want to open according to the downloaded file)

or, if you changed the name of the jar file, replace it but **be careful with the replacement to preserve the syntax**.

Close the run.bat file, saving it.

6. **Double-click** the **run.bat** file. You will see a black window for a few moments, **double-click** on the **VEA - Free fall_International.jar** file or any other previously downloaded file. This last step will open the simulation.

To work with the simulation:

Select **VEA Free Fall (EN).** and click **OK**. The main simulation window will open. Select **Activities** to open a new window with two tabs, **Overview** (with authors and their affiliation) and **Explore**, which contains steps for working with the simulation. In the main simulation windows select **Menu** to access tools or make some changes for an interactive experiment using the simulation.

From this point in Explore are steps for working with the simulation.

Good luck and we hope you appreciate the simulations created!

Note

In case you fail to run any of the simulations, do not hesitate to contact us at scicon.romania@gmail.com