 # Installation Instructions

Welcome to *TPuG: Teaching Programming using Games*.

The goal of TPuG is to motivate students to learn programming through the use of computer games. This document will instruct you how to install the required tools.

TPuG is developed in Java, with a desktop and a mobile version. The desktop version was tested in Windows and Linux. The mobile version runs in devices with Android.

Desktop

In order to use the desktop version, download the file from PVANET:

https://www2.cead.ufv.br/sistemas/pvanet/files/conteudo/503/TPuGdesktop1.7.jar
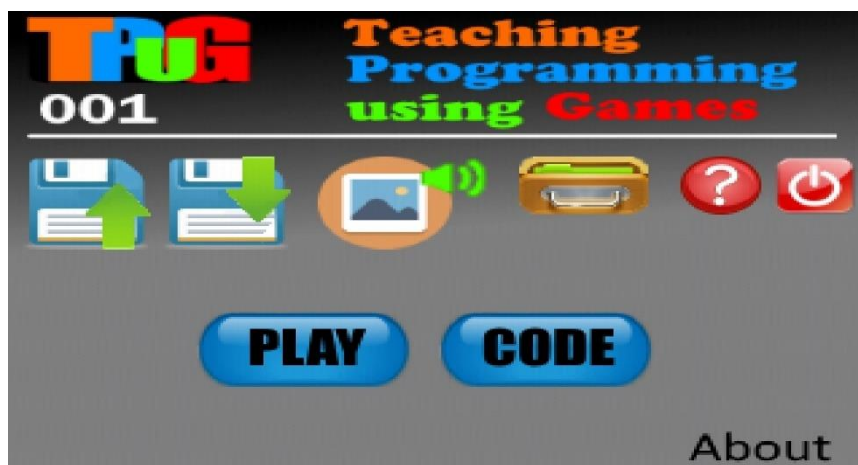
You must have at least a Java JRE installed in your computer. If you do not have Java, visit the link bellow and install a JRE according to your operational system:
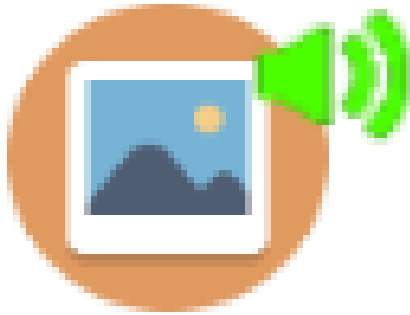
https://www.java.com/pt_BR/download/

Android

Open *Play Store* and search for "TPuG". Download and install the app.

Testing the app

TPuG has been recently developed, and was not extensively tested yet. Especially in mobiles devices, the app may have an unexpected behavior when executing some functionalities. Follow the tests described below and report any problem.

Testing media files

You must find a list of media files that were automatically copied to the local storage area of your device. These files represent pictures and sounds you can use in the games you will develop.

Click in the name of each file. Check if the pictures are displayed and the sounds are played correctly.

Testing the tool for import/export/delete files

As explained in the previous section, your games may use media files stored in your local storage area. This tool allows you to copy files between the local and an "external" storage area.

In the picture below, the left list represents files in the external storage, and the right list represents files in the local storage area. The location of the current external folder is displayed on top.
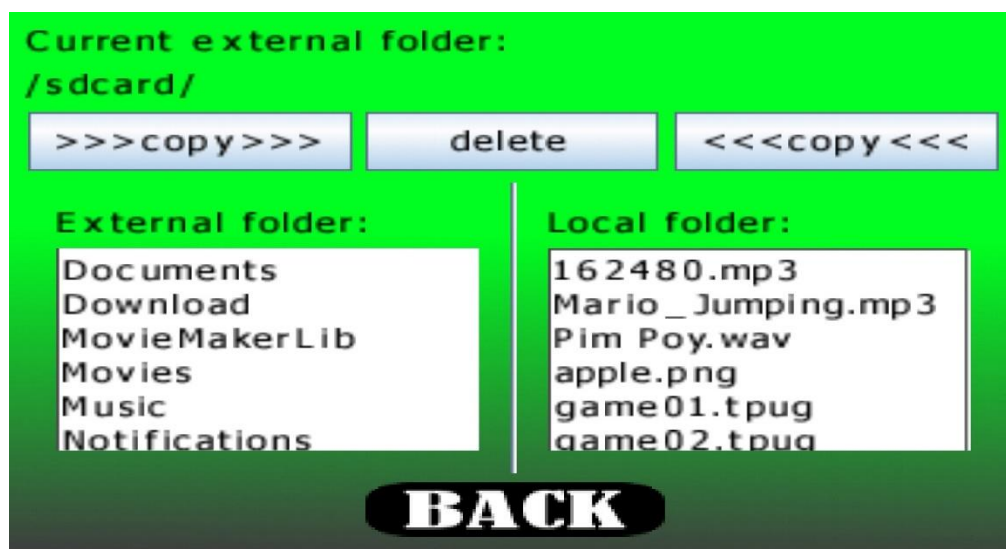
You must find a list of media files that were automatically copied to the local storage area of your device, when TPuG was installed. These files were checked in the previous section ("Testing media files") and represent pictures and sounds you can use in the games.

If you are using a mobile phone, connect it to a desktop using a cable. Try to locate the external folder and copy some pictures (*.png) and sound files (*.wav, *.mp3) to it. Then try to copy the files to the local folder, using the tool above.

Finally, check the files copied, using again the tool described in "Testing media files".

Testing code edition

You may define code for your game with this tool, in 3 different steps:

- START: code that is executed only once, before the game starts.
- MOVE: executed repeatedly, before the screen is painted.
- DRAG: executed when you swipe the screen.

Open the START section and type the following code (if you check the "Insert" button in the right panel, you can choose names to be inserted automatically in the text):

Then open the MOVE section and type the following code:

Testing an execution of the game

Click on the PLAY button and observe the results.

If the everything is working well, you will see a picture of an apple in a grid, and you will be able to listen to the "Pim Poy.wav" audio file.

Please report errors found to the developer.