

*(*MicroApp has been developed and tested on a Windows OS. While it could work with macOS or other UNIX systems as well, adjustments might be needed in the source code for MicroApp to work properly. A tested version for macOS will be uploaded soon!)*

Prerequisites

- **Java (Oracle Corporation) , JRE version "1.8.0 301"**
earlier versions of jre should work as well, but it is recommended that you download the newest JRE version (<https://www.java.com/en/download/>)
- **Matlab (MathWorks, version R2018a)**
earlier versions of Matlab (<2017) should work as well but newer versions are highly recommended

Important: Before you start using the program, make sure that you add both Java and Matlab to your system's library path. For instructions how to do that, please read [here](#)

For Java:

<https://www.java.com/en/download/help/path.html>

For Matlab (Windows):

https://www.mathworks.com/help/matlab/matlab_external/building-and-running-engine-applications-on-windows-operating-systems.html

- To make full use of MicroApp's features, it is highly recommended that you install Matlab's Statistics and Machine Learning Toolbox. If this is not possible, you are advised to exclude statistical reports from your output choices (also see MicroApp tutorial).

<https://www.mathworks.com/products/statistics.html>

- To check for normality tests, the final MicroApp version uses the Shapiro Wilk test as provided by Ahmed BenSaida, please download and add to your Matlab Path*

Ahmed BenSaïda (2021). Shapiro-Wilk and Shapiro-Francia normality tests. (<https://www.mathworks.com/matlabcentral/fileexchange/13964-shapiro-wilk-and-shapiro-francia-normality-tests>), MATLAB Central File Exchange. Retrieved July 31, 2021.

- For creating the error bars in the Matlab figures, a custom made Matlab script from Rob Campbell has been used. Please download and make sure you add it to your Matlab path*

<https://github.com/raacampbell/shadedErrorBar>

The MicroApp.jar executable file is packed with all libraries and dependencies, so it should work without the need for additional downloads. However, if you want to read, change or update the source code (MicroApp Project.jar) , it is recommended that you also install the following dependencies

- For the manipulation of excel files, you will need the Apache POI API. The version used during development of MicroApp is 4.01, the current version (5.0.0) should work as well.

<https://poi.apache.org/download.html>

- For the Java-Matlab interconnection, the Matlab Engine API was used. See details here

<https://www.mathworks.com/help/releases/R2016b/matlab/matlab-engine-api-for-java.html>

** Download the necessary files from the links provided, extract their contents to a folder of your choice, open Matlab and go to File -> SetPath. Browse to your folder and add or save folder to Matlab search path. Depending on your Matlab version, the procedure could be different, please refer to your Matlab's tutorial if you face any problems.*