# Documentation for 2. IVS project

## DreamTeam

### 4/22/2025

## Contents:

## 1. Introduction:

Welcome to DreamTeam's calculator application. With this app you will experience one of the most enjoyable solving math problems of your life. The beauty is in the simplicity. No need for lots of fancy buttons. The focus in developing this app was on performance, design, and the overall experience of solving math problems. This app is suited for basic mathematical operations as well as working with more advanced math.
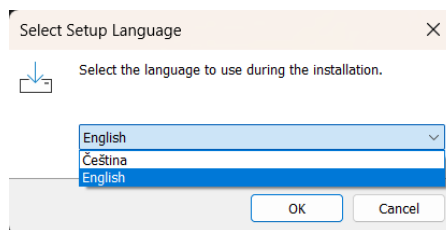Key Features:

- Perform basic operations like addition, subtraction, multiplication and division
- Use advanced mathematical functions such as exponentiation, root, factorial and absolute value
- Support for a numerical keyboard directly in your device
- Don't know what to do? Use the help button for clues.

If this is what you are looking for this manual will show you the essential functions, settings and tips for your best experience.
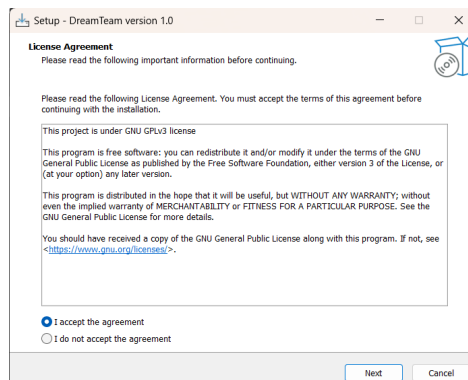
## 2. Installation and uninstallation of program:

For easiest installation use our DreamTeam_Installer.exe when you want to installation the calculator and stddev.exe for installation of standard deviation. Both installers are simple and straightforward. Here is a step-by-step guide for using the installation exe:
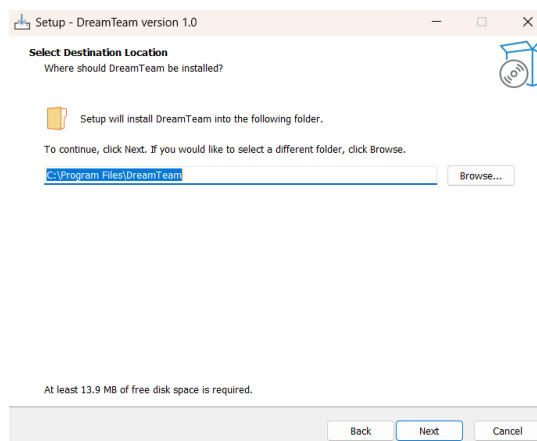
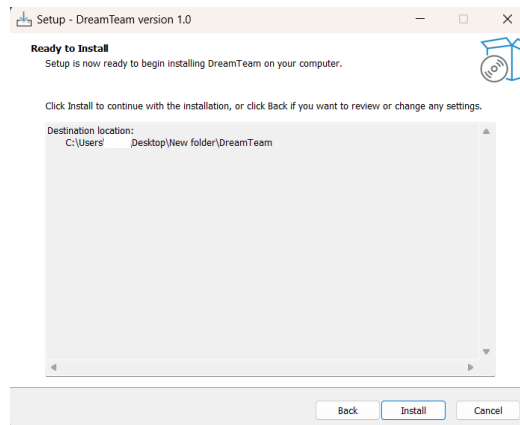1. Select the language to use during the installation
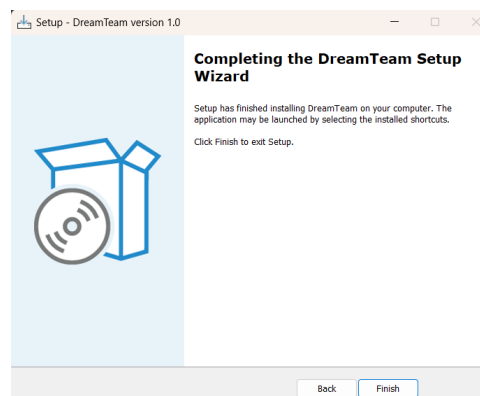


2. Accept license agreement



3. Select a folder where the application should be installed
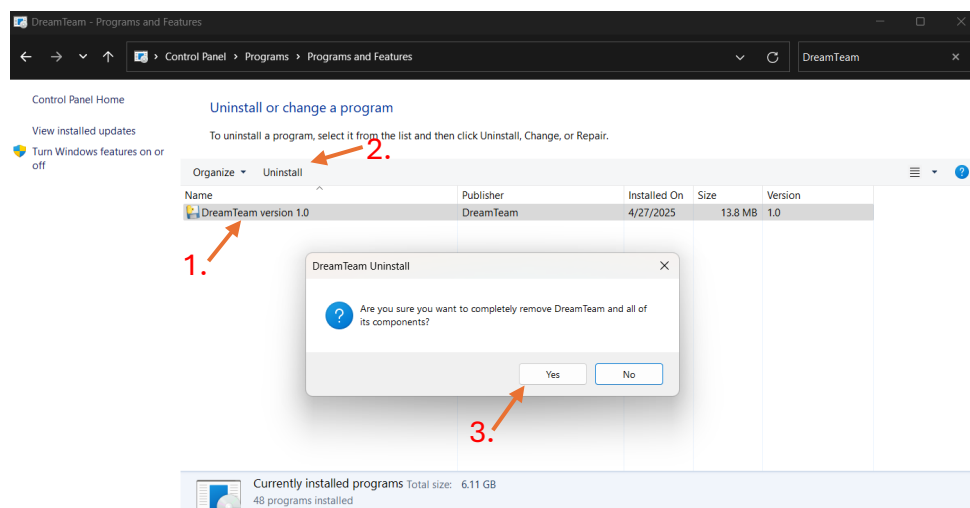
4. Press the install button



5. After successful installation press finish



Now you can find DreamTeam calculator icon on your desktop.

## Uninstallation:

For uninstallation you need to find the program in "Programs and Features" tab of your "Control Panel", press uninstall and confirm the uninstallation.



After successful uninstallation the calculator is no longer in your device.

**If you want to install our application manually here is a step-by-step guide for that:**

Manual installation is almost identical for both programs, the only difference is that for the calculator, the user can create a desktop shortcut
Installation steps:
1. „Freezing „the source file
    a. It is required to have Python and pyinstaller installed
    b. After that, use pyinstaller to create .exe file
        • For stddev: pyinstaller --onefile  --name stddev profiling.py
        • For calculator: pyinstaller --onefile --windowed --name DreamTeam gui_calculator.py
2. Installation
    a. Create an application folder in C:\Program Files
    b. Move the executable (.exe file) into this folder
3. Update Path
    a. Add the path to this folder into the environment variable Path
4. Restart
    a. If the system did not recognize the changes to the path, restart it
5. Creating a desktop shortcut
    • Since creating a shortcut for stddev doesn't make much sense, we only need to create one for the calculator (DreamTeam.exe)
    a. Right-click on DreamTeam.exe
    b. Click on "Show More Options"
    c. Click on "Create shortcut"
    d. The system will either
        o Create a shortcut in the same folder (which you can then move to the desktop), or
        o Notify you that shortcuts cannot be created in this folder and ask if you want it on the desktop. Click "Yes".

**Manual Uninstallation**

The manual uninstallation process is the same for both programs, except that if you created a shortcut for the calculator, you must also delete it.
    a. Delete the program folder in "Program Files".
    b. Remove its path from the system PATH variable (if added).
    c. For the calculator, if a shortcut was created, delete it from the desktop or wherever it was placed.

### 3. *How to work with calculator:*

As mentioned in the introduction, working with our calculator is all about simplicity. Therefore, all the buttons are simple and straightforward. Here is a look at the calculator when you start it.
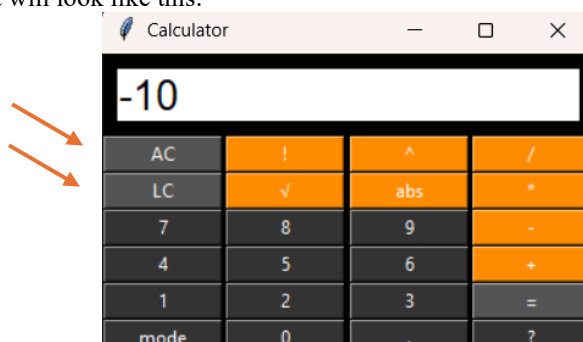


When you want to solve any math problem you first need to type it in, there are two ways to do so.
    a) Click any button you need using mouse cursor directly in the user interface
    b) Click the white box and then use the numerical keyboard on your device

Let's solve something together:



After typing in the math problem, the next step is to evaluate it. To do so press "=" button. Let the calculator do its magic and the output will look like this:



If you want to work with the result, you can start typing and anything that you type will be written after the result. To clean the display, you again have two options:

a)  You can use the AC button to clear the whole display with one click,
b)  Or you can use the LC button to clear the last sign in row (alternatively you can use backspace on your keyboard)

When you use incorrect input (such as shown below) you will come across an error message that looks like this:



To prevent these errors, we highly recommend clicking on the "?" button before using our calculator. Here you can see detailed use of the operands that our app offers.

## 4. Conclusion:

This application was developed as a project for subject IVS on Vysoké Učení Technické v Brně Fakulta Informačních Technologií. The people that stand behind DreamTeam are Jakub Kováčik, Martin Turčan, Aleš Kubiš and Aleš Recman leading the team. To see more details about the faculty or the project itself please visit https://www.fit.vut.cz/.cs, https://ivs.fit.vutbr.cz/projekt-2_tymova_spoluprace2024-25.html . This project was created under GNU GPLv3 license. For more information about our implementation please visit https://github.com/ZnasTo/ivs_dream_team .

We hope that this calculator will fulfill your needs for now. In the future we plan to add more features such as scientific mode, graph mode and programmer's mode. We wish you happy calculating.