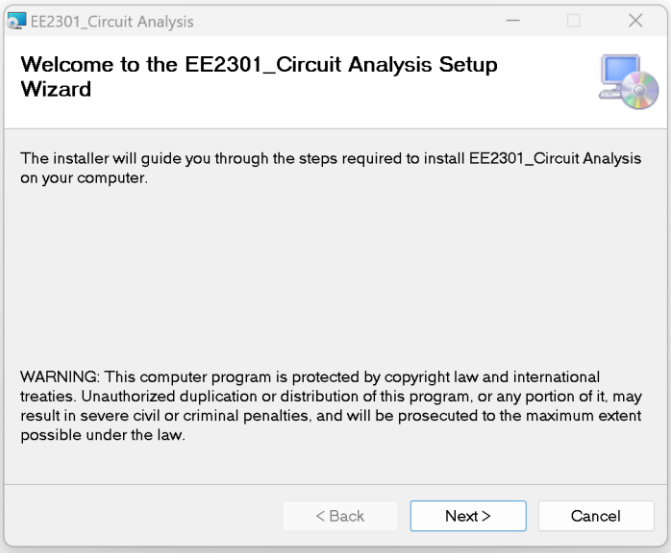
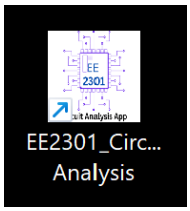
App Installation:

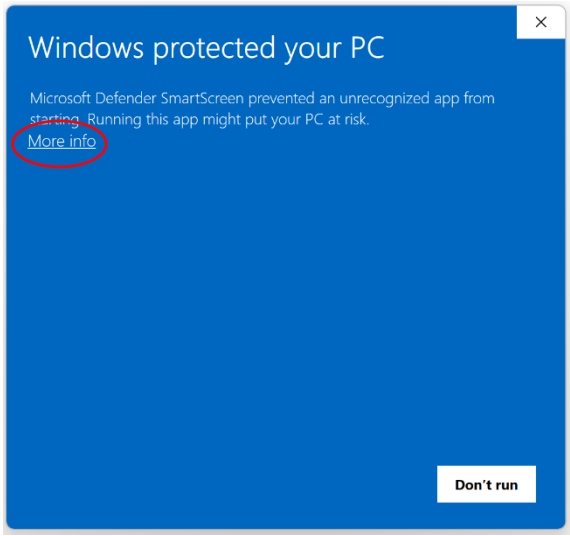
The App is currently compatible with Windows OS (Win 11 preferred). Installation of the App is straightforward. Download the zip file "Circuits App_v1.2.zip" from the google drive link. Then unzip it. Double click the 'setup.exe' file to launch the installer (screenshot on right). Click next and continue installation.



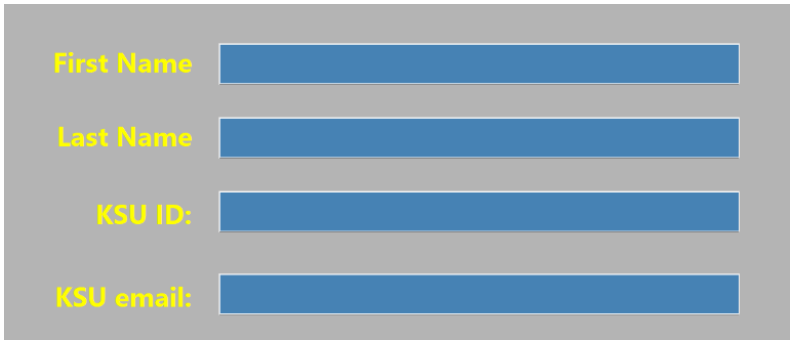
If Microsoft Defender tries to block the installation and opens a pop-up window similar to the one shown on right, then click on the "More info" link and then force installation by clicking 'Run anyway'.

When installation is complete, a desktop icon will be created as shown below.



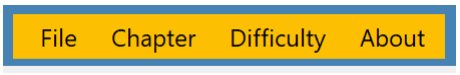


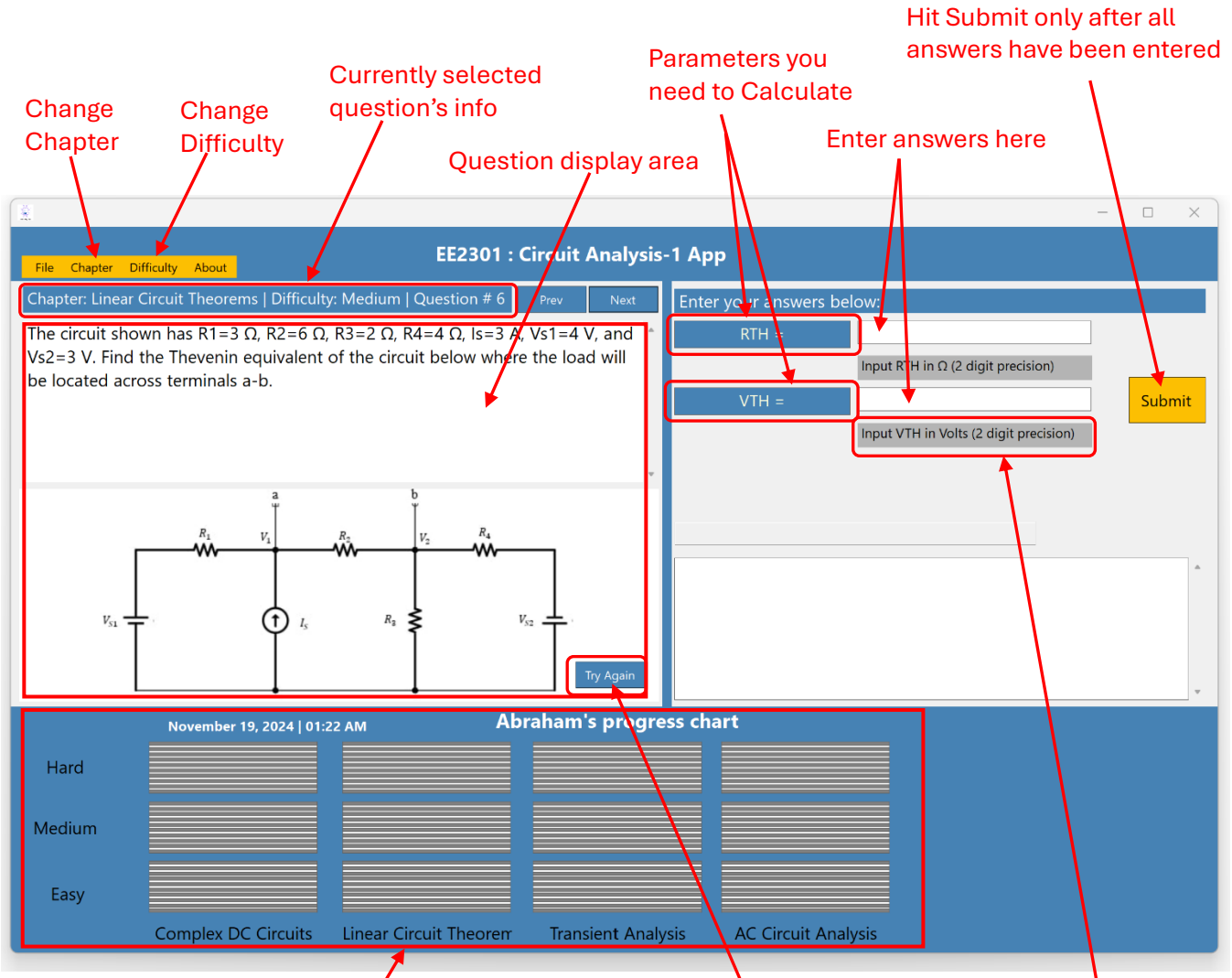
Double click the icon to launch the App. When you launch it for the first time, a login screen will appear as shown on the right. It is **VERY IMPORTANT** to enter your Full Name and KSU ID correctly. Else, you may not receive any extra credits. The App will not allow you to change this information later. Hence, it is imperative that you **double check your entries** before clicking the 'Login' button.



App Interface:

The app interface is simple and intuitive. The top navigation menu allows you to change Chapters and Difficulty levels. Currently, in v1.2, there are four chapters available. Questions in all chapters are tiered into three difficulty levels – Easy, Medium, and Hard. Functions of different regions of the App's interface are explained with the help of a screenshot below.





Progress Chart Area: This region shows and tracks your progress. Once you get a question right, the corresponding bar will become green. If your entered answer is incorrect for a question, then the corresponding bar will become red. **You will need to take a screenshot of this region and submit through D2L by the due date to earn extra credit.**

If you get an answer wrong, you can use this button to generate a new question and try again.

Instruction line: Tells you how to enter your answers. You must use the correct unit asked here, and also input answer with the required precision.

Entering Answers:

Make sure to enter your answers in the correct ***unit*** asked for. For example, if a question has asked to find current and enter the value in **mA**, then you must enter your number (calculated value) in **mA**. Therefore, pay attention to the ***instruction lines***. When entering your answers, just enter the numerical value, do not write units with the numbers.

You also need to enter answers with the minimum ***precision*** asked on the ***instruction line***. For example, in the screenshot above, it asked for the Thevenin resistance, R_{TH} in Ω with 2-digit precision. So, your entered answer/value may look like 7.49 or 122.75; that means, you need to write at least two digits after the decimal point. Let's say for another problem, it asks current to be entered in Amp with 3-digit precision. Then, your entered answer/current value may look like 0.163 or 1.294; that means, you need to write at least three digits after the decimal point (or 3-digit precision).

Progress Chart Area:

The purpose of this App is not only to give you an opportunity to just earn some extra credits, but the broader objective is also to allow you to practice a variety of circuit analysis questions and get instant feedback, which can potentially help you to learn quicker and more effectively. Specifically, it can be a great tool to prepare for exams and test your capacity to solve circuits problems.

The App tracks your progress and displays in the Progress Chart Area. It retains the progress even if you close the App. Once you reopen the App, you should be able to see the progress made so far.

Warning: If you uninstall or reinstall the App, your progress will be reset. **Hence, do not uninstall or reinstall until you have submitted your progress chart snapshot to D2L**. Please communicate with your instructor to learn the specific requirements to earn extra credits.

Hope the App helps you to practice and learn. 😊
