# Small Group Exercise - Design choices text, combo box, accordion, or other

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## **Activity Kind**

Small Group Exercise

## **Purpose**

The purpose of this exercise is to explore design choices for selecting the operand units.

#### **Pre-requisite**

Students are expected to have completed the Individual Research - How does the JavaFX Accordion Select List work?

#### **Tasking**

The small group will explore the pros and cons of using 1) text, 2) combo box, 3) accordion, 4) some tree-like mechanism, or 5) some other GUI widget as the primary option for specifying the units for each input operand.

The small ground shall iterative address each of the five items listed above. As the group addresses each option, each student is expected to record the key points being made (pro or con) about each option in their ENB. The following issues should be discussed for each. Be specific! Draw pictures or diagrams if that will help you be clear. Be sure that each member in your group understands, but it is okay to disagree about the pro's or con's in the group. Don't argue! Just ask questions and when it is clear that there is a disagreement, be sure you capture what **you** believe to be true in **your** ENB.

- 1. How does the user specify the unit of measure for this option and what programming will you have to do to take that input and produce a numeric value from 0, the very first unit in the long list of units this calculator needs to use, to *n*, the very last unit in that list, including the case where the user types the input?
- 2. What are the advantages to the user for this option (e.g. the pros)?
- 3. What are the disadvantages to the user (e.g. the cons)?
- 4. What are the advantages to you, the programmer, for this option?
- 5. What are the disadvantages to you?

When it is clear that most all of the small groups have finished, the mentor will ask all of the students to form **new small groups** based on their belief about which options would be best. It is important that you work with individuals who **agree with you** about this aspect of the user interface. Don't cave in to peer pressure from your friends to stay with a group who wants a user interface that differs from what you believe is best.

#### **Deliverable**

The students **must** take notes during the exercise and record each of the five listed issues for each option in their ENB. If there are no notes from this activity in an individual's engineering notebook, our only conclusion must be that you did not participate.

### **Submission**

Students are expected to complete this part of their ENB prior to starting the next exercise.