Individual Research - Very long selection lists

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Activity Kind

Individual research

Purpose

The purpose of this exercise is to push you to think about the best way to support the user of the calculator when it comes to specifying the units for a value.

Pre-requisite

Students are expected to have:

- Read the papers, Precision V3b and Units of Measure.
- Participated in the small group activity – Define test cases and solutions for multiplication and division with error terms.
- Watched the videos – Dynamic Select Lists and Introduction to Storyboards

Tasking

How will your calculator work when it comes to units?

Will the user type in the units as a sequence of characters? If so, how will you deal with the fact that different people have very different ideas about what the representation of the units should be? For example, is it kilometers per hour, Km/Hr, kph, or what? Should your calculator have to accept them all and then translate the input into a standard form?

Should units be implemented as a ComboBox select list or a set of buttons or what?

The purpose of this activity is for you to explore these questions by actually merging samples that have been provided to you into a copy of your user interface testbed, so you can actually experiment with what it looks like and how it works.

Please remember that not all values have units associated with them. For example, if you are computing the average of a set of numbers and there are four values in the set, the value 4 that is used to compute the average does not have a unit specification.

Deliverable

You are expected to perform a set of experiments, capture key aspects of from these experiments in your ENB and to explain what is good, bad, or both about each result.

Submission

Each student must produce and submit the above-described material prior to the end of your activity.