Build and Share Interactive Content

Maple 2024 provides additional tools for creating documents and interactive applications programmatically. These tools can be used to develop Maple Learn content or to create applications to be used in Maple. Maple Learn is an online environment designed specifically for teaching and learning mathematics.

New Layout Engine

The ShowCanvas command now uses a more sophisticated layout by default, rather than a pure grid. This allows, as in the following example, multiple smaller items, such as buttons to be placed next to larger components, like a plot.

```
Grading:-Quiz("Which is a plot of $\{FUNC\}$?", 1,
  proc ()
    randomize();
    local A := [sin(x), cos(x), tan(x)][rand(1 .. 3)()];
    Grading:-Quiz:-Set("$\{FUNC\}$ = A);
    [plot(A), plot(-A), plot(Pi*A, x = -2*Pi .. 2*Pi)];
  end proc,
  gradeisindex = true,
  title = "Plot Multiple-Choice Randomized",
  style = multiplechoice,
  output = showcanvas
);
```

Plot Multiple-Choice Randomized

Which is a plot of $\sin(x)$?
Practice Sheets

When you give your students a practice quiz involving money, percentages, etc. you may want appropriate symbols such as $ and % to be used in the question and beside the response. In Maple 2024, the PracticeSheet command has new options, suffix, qsuffix, prefix, and qprefix, that allow decorations the generated question content and response areas.
Converting Decimals to Percentages Practice

Convert the following decimals to percentages. Do not type the % symbol.

\[
\begin{align*}
0.92 &= 92 \% & 0.44 &= 44 \% \\
0.95 &= 95 \% & 0.05 &= 50 \% \\
0.97 &= 97 \% & 0.58 &= 58 \%
\end{align*}
\]

Check My Work

New Sheet