I want to design a simulation interactive for my students.

Grade level: Secondary 3

Student readiness level: Mixed Abilities

The simulation is based on: calculation of annual depreciation expense of non-current assets

The objective of the simulation is to: understand how the date of purchase, last day of accounting year and the phrase "a full year's depreciation is charged in the year of purchase" affects calculation of annual depreciation expense of non-current assets.

While using the simulation, students should experience: experimenting with different variables (i.e date of purchase, last day of accounting year and "a full year's depreciation is charged in the year of purchase)

The interface should include: drop down list for students to select the variable "Date of purchase" where values consists of 1 Jan 2023, 1 Feb 2023, 1 Mar 2023, 1 Apr 2023, 1 May 2023, 1 Jun 2023, 1 Jul 2023, 1 Aug 2023, 1 Sep 2023, 1 Oct 2023, 1 Nov 2023, 1 Dec 2023; drop down list for students to select the variable "Accounting year end" where values consists of  31 Jan, 28 Feb, 31 Mar, 30 Apr, 31 May, 30  Jun, 31 Jul, 31 Aug, 30 Sep, 31 Oct, 30 Nov, 31 Dec, a checkbox for student to select whether the qn has the phrase "a full year's depreciation is charged in the year of purchase",  results panel showing depreciation expense for 2023, 2024 and 2025 for both straight-line and reducing-balance method, reset button.

For straight-line method, annual depreciation expense = % x Cost

For reducing-balance method, annual depreciation expense = % x Net Book Value

The scenario is a piece of equipment costing $12 000.

Rate of depreciation = 20%