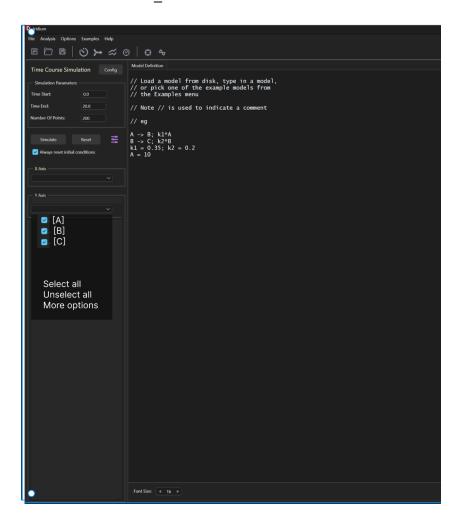
## 1. CREATE DROPDOWN FOR Y\_AXIS



Improving the consistency between the X-axis and Y-axis input methods would indeed help with usability. If the X-axis has a dropdown menu for selection and the Y-axis does not, users might find this inconsistency confusing, as it breaks the expected pattern of interaction.

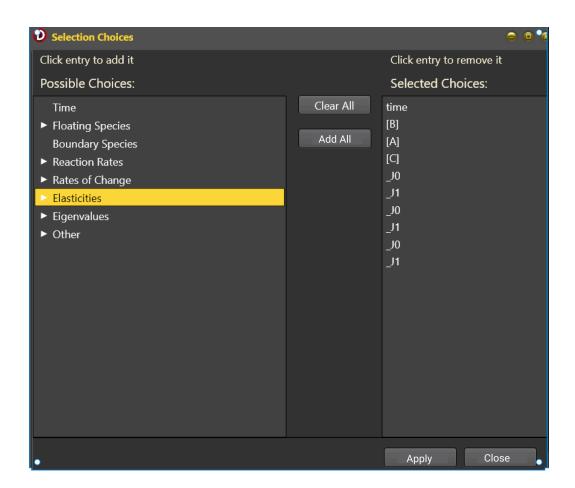
Here are some suggestions for improvement:

- Consistent Input Controls: If the X-axis uses a dropdown menu, consider implementing a similar dropdown menu for the Y-axis selection. This way, users have a consistent way of specifying both axes.
- Labeled Sections: Clearly label the section for the Y-axis selection and provide a UI element that clearly indicates how to interact with it, such as a dropdown arrow or a select box.

- **Default Values**: If applicable, set default values for both the X-axis and Y-axis to provide a starting point for users. (Time for x, and [A], [B], [C] for y).
- **Feedback on Interaction**: After clicking the 'Simulate' button for the initial graph generation, subsequent changes to the values on the X-axis and Y-axis will result in the immediate updating of the graph without the need for another 'Simulate' click to confirm the action has been registered.

When we click on 'More options,' we can select additional items to display on the y-axis. These selections will be added to the y-axis dropdown menu, allowing users to easily toggle them on or off. This feature simplifies the process of including commonly used options without the need for accessing a separate pop-up window.

#### 2. ENHANCEMENTS TO THE "MORE OPTION" FEATURE

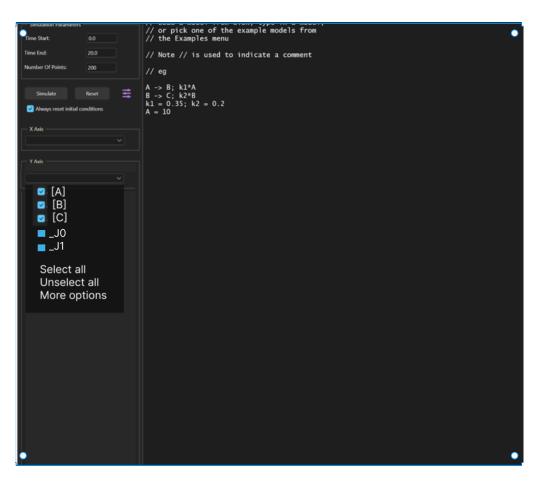


- **Enhanced Entity Selection**: The "More Options" feature now includes a pop-up that allows users to add additional entities for the Y-axis.
- "Add All" Functionality: Introduce an 'Add All' button within the pop-up to enable users to quickly select all available entities at once, saving time and effort.

## - Application of Choices:

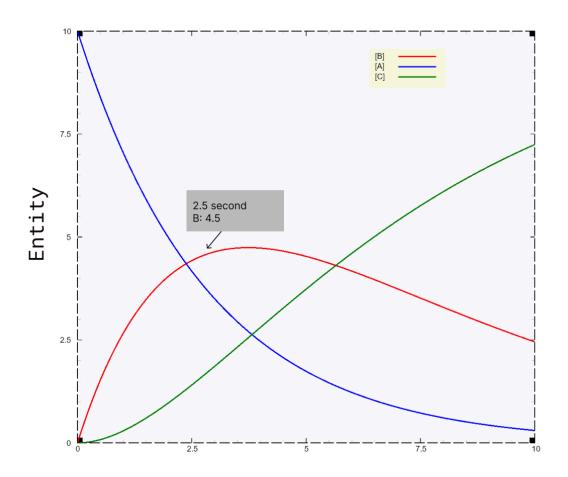
- Implement an 'Apply' button which confirms and applies the user's entity selections.
- Once applied, these entities are added to the dropdown menu for easy access and can be used in future simulations without the need for reselection.

After you add \_J0 and \_J1 to the Y-axis, they will show up in the dropdown menu. This makes it easy to turn them on or off right from the menu, so you don't have to pick them again in the popup every time.



#### 3. ADD TOOLTIPS ON HOVER AND LABEL FOR GRAPH

# Transition of substances in chemical reaction



# - Tooltips on Hover:

- When the user moves their cursor over a data point on the graph, a small box (tooltip) appears next to the cursor.
- This tooltip typically displays detailed information about the data point, such as its exact value, the time it represents, or additional metadata.
- Tooltips help users understand what each point on the graph represents.
- Axis labeling: Both axises have the clear label which indicates what data they represent.
- **Graph title:** Title of graph is descriptive of the data it represents.