previously defined model system can be loaded from options panel - currently just a white button

blank and loaded scenes can be reset to initial values

added state population cache that allows forward and backwards stepping through model run - still needs logic to reset plot from current position

adding states to sandbox now loads in grid that stays within sandbox area

all sandbox elements are now confined to sandbox area on drag

added sandbox area trash icon with drag and drop functionality to remove states

fixed options panel alignemnts

fixed graph alignments and labeling

fixed graphs updates with forward and backward stepping

fixed input fields to allow only proper text and disallow duplicate names

added speed up and slow down control functions

bug000: fix make second connection error : missing chain constructor call in connection class

bug001: added logic to check for existing model component in rate equation variables in

RateEquation.cs

bug002: added logic to dropdown to disallow duplicate selections in the same rate equation

bug003: disallow multiple of same connection from left panel

TODO:

~~bug000: can’t make second connection on sandbox~~

~~bug001: disallow multipe rate modifier connections~~

~~bug002: disallow adding same variable twice to rate equation~~

~~bug003: disallow multiple of same connection from left panel~~

~~bug: change default term in dropdown to blank~~

~~bug: step buttons crash on custom model?~~

~~bug: when changing starting amount, backstepping goes to intialized value~~

~~bug: crashes on large numbers - todo: replace custom poisson draw with math library~~

~~bug: remove color button click feature~~

bug: put states/rates/connections in scroll window to prevent pushing objects out of screen

bug: trashing state, rate connection line modifier remains

bug: fix error only allowing two added rate elements: caused by overlay bleed to sandbox : todo: replace with equation builder?

~~feature: reset graph only~~

~~feature: add remove connection parameter~~

~~feature: draw circulat bezier curve for self connections~~

feature: undo/redo queue

feature: connections make state containers dropdowns

~~feature: replace text inputs with dropdowns of allowable values~~

~~feature: save state function~~

feature: text popups over buttons

feature: shift colors on repeat

feature: window resizers

feature: popout graph?

feature: tab selection cycling

formatting: space x and y axis on graph so they don't overlap

formatting: x values cutoff on edge of screen

formatting: make clear that trash is drag and drop

formatting: default cursor starts at state/rate label instead of population

todo: simmer.io ad popups?

todo: population dependence?