Comp261 Assignment1
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My assignment covers the three stages - Minimum, Core and Completion.
I have done some of the Challenge questions.
My code works in the following ways:
The Adjacency list on my assignment utilizes the Map collection of stops. Each stop has a list
incoming objects and outgoing connected objects.

* The "OnLoad" Method - the OnLoad method I use has 3 different methods, these are loadAllStops, loadAllTrips
loadTrie.

i. loadAllStops :- The code loads all the stops out of the data file. It does this by using
BufferedReader.
ii. loadAllTrips :This works by using BufferedReader to read the trips from the data
file. It makes connected objects and stores the connected objects
and stops in the trip.
iii. loadTrie.:- It calls the add method. Then it utilizes the char array from the
stop name to store a stop object within the trie structure.

* onSearch :- onSearch uses a Map which holds stop objects that can then be accessed by
a string. onSearch in the first section resets and clears the field

(e.g. by selectedconnections) that contain connections through a selected stop
and resets the boolens in the stop objects to "false". This
means that none of the stops are hightlighted.
In the second section it looks for user input into the trie structure
and then returns a list of matches.
The Matching Stop names are then printed in the text field.
The third section highlights the trips going through the stop,
and only is only effective if the search is exactly the same.
In addition I changed the onSearch to be case sensitive.

* onMove :- onMove moves in the following ways - left to right, up and down and zooms
in and out. It can zoom in to view individual stops. Then it can also zoom
back out. However it will be slightly smaller than before you used

the zoom feature.

* onClick:- This works kind of like like onSearch. But it is more simple because it
does not need to use the trie structure. If you click on the closest stop
on the graph then it selcts the stop and highlights it and displays the name
in the JTextArea. The id of the trips running through the stops are then
printed and the trips are highlighted.

CHALLENGE

This is how the challenge questions that I completed work:

* onDrag :- Processes drags events that happen on graphics pane and it moves the origin
depending on how far the user is dragging it.

* onPress :- the mouse button events are processed and sets the global field dragStart
to the location of the mouse. I did so that when the onDrag is called
the program can calculate how far the user is dragging the screen
to move origin to there.

* onScroll :- all the mouse wheel scroling events on the graphics pane are processed.
It then changes the rendering scale depending on the direction
of the scroll and how far it is scrolled
This means scroll wheel can zoom in and zoom out.