multi-table-comp

multi-table-comp is a Vue.js (>= 2.5) web component that displays multiple sub tables of data from a single parent table. The contents of a sub table is expanded/contracted by displaying/hiding the associated rows in the parent table.

multi-table-comp can be installed via with the included <code>package.json</code> file for a local installation via the <code>npm install</code> command. **multi-table-comp** depends on the <code>vue.js</code> framework. A demo folder is provided that used <code>Parcel</code> together with its associated <code>package.json</code> file to bundle together **multi-table-comp** along with its <code>vue.js</code> dependency for a simple application. Further details are provided below for running the demo.

Props

A prop in Vue.js is a custom attribute for passing information from a parent component hosting **multi-table-comp** instance(s) to an **multi-table-comp** as a child component.

multi-table-comp has the following props for a parent to bind and send information to:

title -- a title to be placed above the parent table (string, default: null)

headings -- the headings that all of the sub tables have in common (array, default: null)

column_widths -- the column widths (in pixels) for each of the sub tables' columns (array of numbers, default: [120,120,...]

tree_line -- defines the type of display lines that connect a sub table's name label with its rows. Accepted values are 'black', 'white', and 'dotted'. (string, default: 'black')

css_variables -- defines the css variables for **multi-table-comp** (object, default: null)

tables -- defines the sub table data to be displayed (object, default: null). The following is an example of tables taken from the included demo:

```
tables: {
 House: {
   open: true,
    data:[
      ['Carrion Fly', 'Worldwide', 'gray'],
      ['Office Fly', 'California, Bay Area', 'white'],
      ['Common House Fly','-','brown']
   ٦
 },
 Horse: {
    open: true,
    data: [
      ['Horn Fly', 'Kansas', 'red'],
      ['Face Fly','-','green'],
      ['Stable Fly','-','black']
    ٦
 }
}
```

The keys to the tables object act as the labels for each of the sub tables. Each table key is assigned an object with the open key (a boolean that expands the table when initially rendered if true) and the data key which is an array of arrays of the sub table's data.

Styling

The <code>css_variables</code> prop is a javascript object that contains any combination of css variable names as keys and associated values. The following list are the css variable names along with their default values for a quick styling of **multi-table-comp**:

```
multitable_comp_font_family: 'Verdana,serif',
multitable_comp_title_font_size: '1rem',
multitable_comp_title_color: 'black',
multitable_comp_thead_color: 'black',
multitable_comp_thead_border_bottom: '1px solid black',
multitable_comp_thead_background: 'transparent',
multitable_comp_tbody_height: '20rem',
multitable_comp_down_icon: '\21D3';
multitable_comp_cell_font_size: '1rem'
multitable_comp_cell_color: 'black'
}
```

Events

multi-table-comp has an event that notifies the parent component when a sub table cell is clicked. **multi-table-comp** emits the following single named event:

```
'multitable_comp_cell' -- returns the label of selected sub table along with the row and column cell index
```

The parent component can listen to the above event and provide a callback for further processing. Events emitted from a child component back to the parent is explained at <u>Vue Custom Events</u>.

Demonstration

One demonstration of **multi-table-comp** is provided and can be viewed by hosting the <code>index.html</code> file in the <code>demo/dist</code> folder. The demo (templated in the <code>App.vue</code> file) displays two sub tables labelled <code>House</code> and <code>Horse</code> for two type of American flies. The sub tables have columns for <code>Fly Name</code>, <code>Location</code>, and <code>Color</code>.

As a suggestion, install http-server locally/globally via npm then enter the command http-server in the multi-table-comp dist directory. From a browser enter the url: localhost: 8080/ to view the demo.

Here is some example code for using **multi-table-comp** taken from the App.vue file:

```
<multi-table-comp
  :title="title"
  :headings="headings"
  :tables="tables"
  :column_widths="column_widths"
  :tree_line="tree_line"
  :css_variables="css_variables"
  v-on:multitable_comp_cell="show_cell">
  </multi-table-comp>
```

And here are the data references:

```
{
  title: 'American Flies',
  headings: ['Fly Name', 'Location', 'Color'],
  tables: {
    House: {
      open: true,
      data:[
        ['Carrion Fly','WorldWide','gray'],
        ['Office Fly', 'California, Bay Area', 'white'],
       ['Common House Fly','-','brown']
      ]
    },
    Horse: {
      open: true,
      data: [
        ['Horn Fly', 'Kansas', 'red'],
        ['Face Fly','-','green'],
        ['Stable Fly','-','black']
      ]
    }
  },
  column_widths: [240,240,80],
  tree_line: 'dotted',
 css_variables: {multitable_comp_cell_font_size: '20px'}
}
```

Note that the demo listens to the multitable_comp_cell event (i.e. v-on:multitable_comp_cell="show_cell") and displays the payload at console.log.