Flowchart Editor for PC using jsPlumb.js

The flowchart editor was implemented using jsPlumb.js library. Following are the instructions on how to use it and the limitations of the implementation.
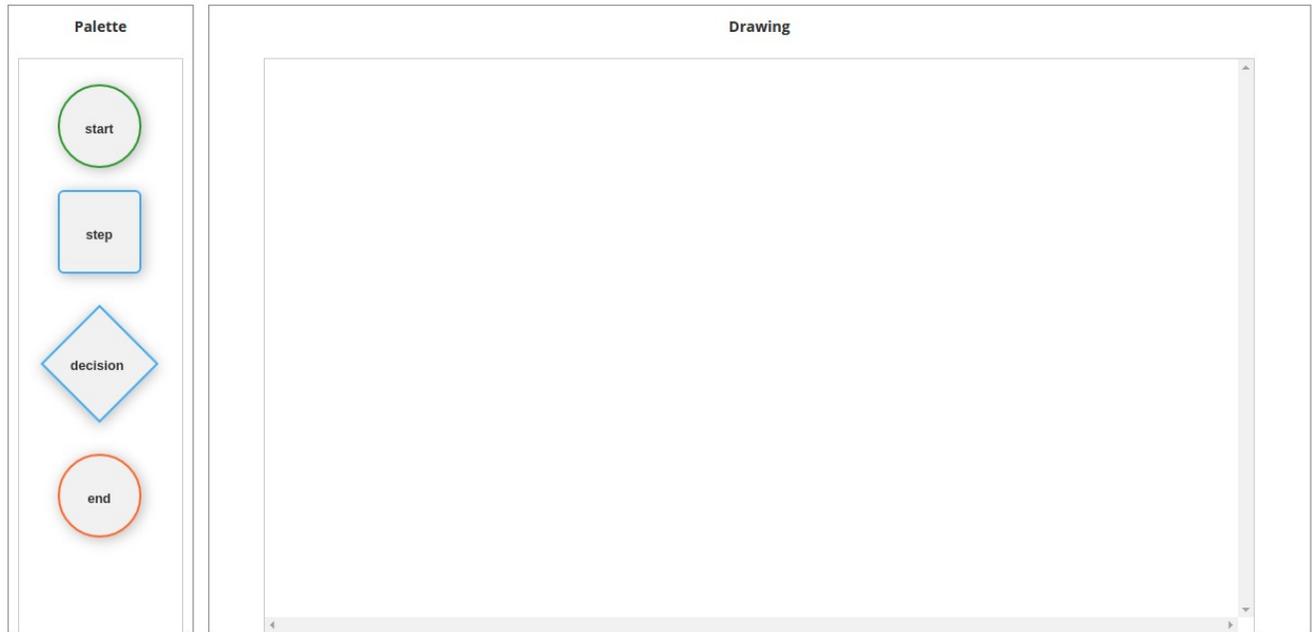

Figure 1 – The Flowchart Editor

- To insert a new element, click on the element in the palette and click on the drawing area. Following are the available elements:
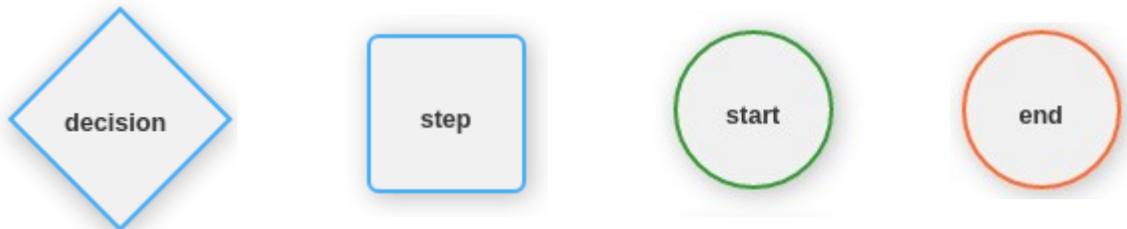

Figure 2 – The Elements in the Editor

- To connect two elements, drag from the source endpoint and drop the connection to the target endpoint.
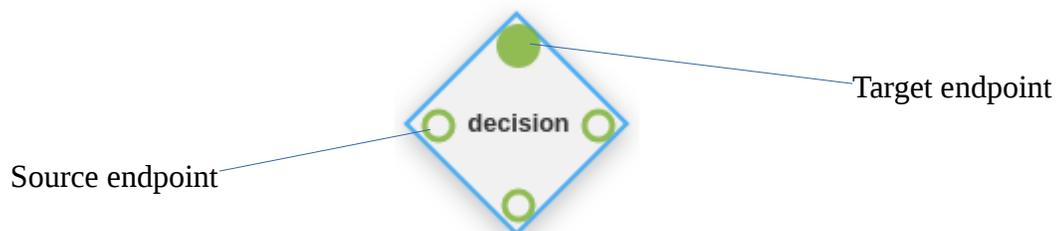

Figure 3 – The Endpoints

- Every basic element has its own specific endpoints. User cannot alter them but, user can draw multiple connections from one source endpoint.
- You can add a label to the connection as well. A dialog box will be prompted when the user drags and drops a connection.
- To edit the content of the elements, double click on the text.
  - Note that content editing is available only in the step and the decision elements as start and end elements do not require this functionality.
- User can drag the elements within the drawing area.
- User can resize the step element by clicking and dragging it.
- User can delete an element by selecting it (the selected element is shown with a red color border) and pressing the delete button. Once an element is deleted, its endpoints and all the connections attached to it will be deleted.
- User can delete connections as well. This can be done by double clicking on the connection.

<u>Limitations</u>

- Downloading the flowchart diagram as a PNG was very problematic as the drawing area contains more than one SVG element (the connections and the endpoints are created as SVG elements). I tried using html2canvas.js, canvas2image.js and canvg.js however, when saving only the div elements were saved as PNG.
- There was a problem in the endpoints of the decision element. Once the decision element is placed on the canvas, the endpoints get dislocated and once it is dragged in the canvas, the endpoints remain in the correct locations.
- There was a slight problem when the resizing functionality was added to the decision element. The endpoints dislocated when the decision element was being resized. Hence, the decision element was made re-sizable using the + and – keys.