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| JPeNS – Group 5 |
| Java Petri Network Simulator |
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**What is JPeNS**

Our Java Petri Network Simulator, or JPeNS for short, is a program that aids in the visual representation and learning of Petri Networks in a visual way. It is meant to give the user both a hands-on and visual experience while learning about these networks. It is designed to be interactive and displays real-time feedback when you fire a transition.

Petri Networks are a way to visual represent or layout a descriptive network for a trigger or action based system. These networks are drawn as directed bipartite graphs. Bipartite means that the nodes in the graph can be divided into two disjoint sets with edges connected nodes in opposite sets but not connecting to nodes within the same set. A directed graph means that the edges go in one direction, like one way streets. In the case of Petri Network diagrams, the places and transitions are split into the two sets. That is to say, a place can only connect to a transition and a transition can only connect to a place. Places cannot connect to places and transitions cannot connect to transitions. However, multiple places can connect into one transition and one transition can connect out into multiple places.

**Why JPeNS**

**System Description**

**Results**

**Conclusion**