

**COS 301 Main Project**

**Flowchart Simulation Tool User Manual**

**ThinkTech**

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# 1 General Information

## 1.1 System Overview

Flowchart Simulation Tool is an application which allows for designing and executing flowchart diagrams. This application is intended for academic purposes for students with basic knowledge of programming design and implementation.

# 2 System Summary

## 2.1 System Configuration

The flowchart tool is intended to operate on any Linux distribution. However, it can also be used on Windows and Mac OS.

Any version of Java should be installed to allow for successful execution of the program.

# 3 Getting Started

## 3.1 Running Software

The application will not require any installation. To run the application simply click on the executable file and the application will startup.

## 3.2 Software Layout

The layout is composed of the canvas, flowchart tools and menu options.

- **Canvas** - This space is provided to design a well-formed flowchart. Components will be dragged from the flowchart tools menu consisting of available components and dropped onto the canvas.
- **Flowchart Tools** - This contains all the tools required to construct the flowchart. All the components will be dragged and dropped onto the canvas. Flowchart Tools also includes buttons to run the simulation step-by-step and start-to-end.
- **Menu Options** - The menu option provides options of creating, saving and loading projects onto the canvas.

## **4 Using the System**

### **4.1 Creating New Project**

To create a new project select "File" in the menu bar and a drop down menu will appear. Select the "Create New Project" option, a pop-up window will appear requesting the desired file name for the project.

### **4.2 Adding Components to Canvas**

Adding a component to the canvas is as simple as dragging and dropping a component from the Flowchart Tools. Select the component that you wish to add to the canvas and then drag it to the desired location on the canvas and then drop it.

### **4.3 Editing Component**

Editing the component entails manipulation of the features and adding code inside the component. To edit the component double-click on the component and a pop-up window will appear with the options of changing features or adding code.

### **4.4 Removing Components from Canvas**

To remove any component from the canvas right-click on the component and select delete component. To remove multiple components hold the "SHIFT" key and select the components and then right-click and select delete component.

### **4.5 Saving Project**

To save your current progress go to "File" in the menu bar, in the drop down menu select "Save". Enter the name of the file and then the project will be saved in a directory for flowchart projects.

### **4.6 Run Simulation**

To run the flowchart select the "Run" icon on the flowchart tools window and the whole flowchart will execute. To run the flowchart step-by-step select the "Step" icon.

### **4.7 Opening Existing Project**

To open an existing project go to the menu bar and select the "File" option and then select the "Open Project" menu item. Search for an existing

flowchart project with the valid extention. The flowchart project will now be loaded onto the canvas and should be able to be updated.