LAB SESSION
DCIT 203
Lab 1: Introduction to Logisim Environment

Deadline: Monday, November 27, 2023, Time: 11:55pm

This lab session introduces Logisim - an educational tool for designing and simulating digital logic circuits.

Introduction

Logisim is an educational tool for designing and simulating digital logic circuits. With its simple toolbar interface and simulation of circuits as you build them, it is simple enough to facilitate learning the most basic concepts related to logic circuits. With the capacity to build larger circuits from smaller sub-circuits, and to draw bundles of wires with a single mouse drag, Logisim can be used to design and simulate entire CPUs for educational purposes.

Objectives of this lab session

The objectives are to:

- Learn the various controls and functionalities in the Logisim environment.
- Learn how to design and debug basic digital logic circuits in Logisim
- Understand the procedure followed to design a simple logic circuit.

Tasks

1. You are required to explore the Logisim environment and describe the following components in detail:
    - The Menu Bar
    - The Toolbar
    - The Explorer pane
    - The Attribute Table
    - The Canvas area
2. Describe the steps involved in designing a simple logic circuit.

Installing Logisim

Here is the link of Logisim Home page for your reference:
http://www.cburch.com/logisim/index.html

Download and install the Logisim.
Logisim can be downloaded from this website:
https://sourceforge.net/projects/circuit/

Note: You need to install the Java Runtime Environment before you can run the Logisim application.
You may download the JRE from the website link below;

https://www.java.com/en/download/