

TCSS372 – Computer Architecture
Project 1 – MIPS Simulator using Java Programming
50 Points

Submit a zip file of all your .java files (NO OTHER files) on Canvas. Name it **uwnetidSimulator.zip** or **uwnetid1uwnetid2Simulator.zip**, using your uwnetids. Your names must be in the header of each java file that you modified.

Simulator Instructions

The simulator should implement the **no pipelined** MIPS 32-bit ISA to provide the execution of the following instructions. We will discuss this project in class to figure out how one would go about building something like this.

R-format:

1. ADD
2. ADDU
3. AND
4. OR

I-format:

1. ADDI
2. ADDIU
3. ANDI
4. ORI
5. LW
6. SW
7. BEQ
8. BNE

J-format:

1. J
2. JR

Deliverables:

- 1) Design documentation are required in the final submission (UML class diagrams)
- 2) The code should be object-oriented and JUnit tests for each Java file written are a must!
- 3) The user interface of the simulator can be console-based or GUI based (visually appealing and easily usable functional interface is worth a few extra points)