

Final Project: Part 2

COEN 122



Demo

- Demo and report are due on Friday Week 10
- 1 submission per team

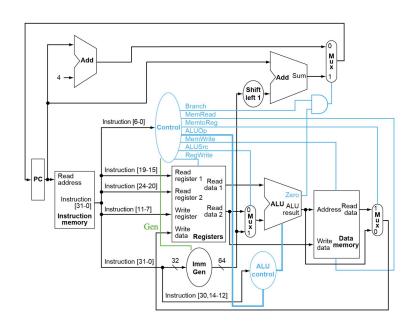


Control Unit Truth Table

- regWrite: whether to write on register file
- memtoReg: whether to write data read from memory on register file
- PCtoReg: whether to write PC on register file
- branchN:
- branchZ:
- jump:
- memRead: whether to read from data memory
- memWrite: whether to write into data memory
- aluOp: which operation for the ALU is needed



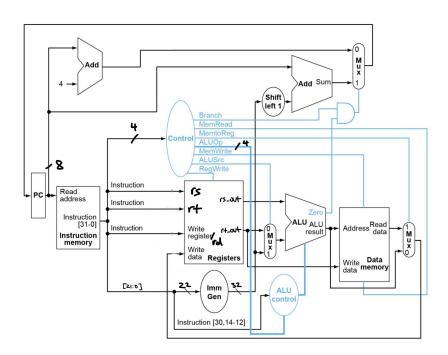
Simple Datapath for R-Instruction Format



ор	rs	rt	rd	shamt	funct
000000	10001	10010	10000	00000	100000



Simple Datapath with Control Unit



Opcode (4 bits) rd (6 bits) rs (6 bits) rt (6 bits) unused(10 bits)