

## **Milestone 1**

### **Monday, Oct 5, 2020: 2 hours**

Writing design document and figuring out processor specifics: stack-based, addressing, registers

### **Tuesday, Oct 6, 2020: 2 hours**

Writing sample programs in assembly  
Converting said assembly to machine code

### **M2 task assignment:**

1st meeting: break instructions into small steps and move data from one register to another, determine single-cycle or multi-cycle

Luke & Austin: RTL Description of each instruction

Jinhao & Yiju: A list of generic components specifications needed for RTL

## **Milestone 2**

**2nd meeting:** debug and test the processor through Xilinx ISE and fix existed problems

### **Wednesday, Oct 14, 2020: 1.5 hours**

Reviewing Luke's RTL descriptions  
Creating Executive Summary

### **M3 task assignment: Create design diagram**

Begin Xilinx work  
Begin Xilinx testing

## **Milestone 3**

### **Sunday, Oct 18, 2020: 2.5 hours**

Verifying RTL  
Created initial datapath design

### **Tuesday, Oct 20, 2020: 1.5 hours**

Created ALU with unique operations

Created ALU testing program

**Wednesday, Oct 21, 2020: 2 hours**

Came up with integration plan

Refine datapath, unit specification

**M4 task assignment:**

Things for Milestone 4

- Continue implementing necessary components and adding unit tests
  - Jinhao - sign-extender
  - Austin - adder
  - Jinhao - left-shifter
  - Luke - register
  - Someone - memory blocks
- Start on integration testing plans
  - Group Meetings (might split out individual work later)
- Implement Control
  - Luke

**Milestone 4**