

1/25/23

- Added clocks to components
  - Need to have clocked registers for pipelines
- Listed controls for rtl
- Implemented muxes and regs
  - This process let me know that they have to be clocked

1/22/23

- Met with team to do rtl
  - Changed specifications of components for pipelining (esp. branch)
  - Completed stages 1-3 of datapath
  - Datapath design is still open for hazard controls
- TODO: implementations of a few components

1/18/23

- First revision for translating full files
  - Split into two entry points, one for single instructions and once for files in order to make debugging easier and abstract out common logic
  - Loop through file to get label addresses, loop again to replace labels with addresses
  - Added parameters for flexibility in case of multi-file instructions
- Met with team
  - Generated naming conventions - based off of common sense, but made it consistent
  - Generated component specifications

1/15/23

- Worked on creating RTL for m-type instructions
  - Two different rtl paths chosen, due to the number/similarity of instructions to each other. This allows us to reduce the size of our datapath, increasing the speed of our hardware
- Initial planning for labels on assembler
  - Used so we can put entire assembly programs and have it translated to machine code
- Fixed machine translation for relprime and gcd
  - Original label byte offsets were off

1/11/23

- Adjusted assembler based on changes to instruction set
  - New instruction types, modified codes for each one

- Adjusted memory map
  - Works with 16 bits instead of a lot more
- Translated euclid's algo and gcd into machine code

1/9/23

- Built assembler

1/8/23

- Met with team members to start milestone 1
- Chose load-store
  - Simple to implement, familiar instruction set
- Worked on building instruction set, instruction types, and registers