

1/31/23

- Went over how to write tests and components with team
- Helped compile project
 - Fixed quartus errors
- Started writing control flow
 - FSM since pipelined processor

1/30/23

- Created test bench folder
 - Separate test benches from components
- Started writing tests for immgen
 - Created skeleton for reg file

1/28/23

- Finished assembler
 - Needed to clarify some formatting issues
 - Added rules for formatting and syntax

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