Team Name: sdmay21-38

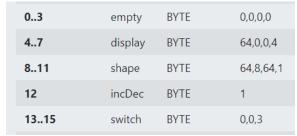
Team Members: Colby McKinley, Aiman Priester, Eric Marcanio, Brady Kolosik, Byrce Snell, Jacob

Betsworth

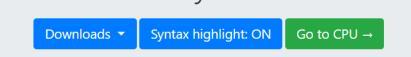
Report Period: March 15th- March 29th

# Past week accomplishments

- Eric Assembler
  - Able to run PONG application without errors
  - Data memory numbering fixed with multiple arrays



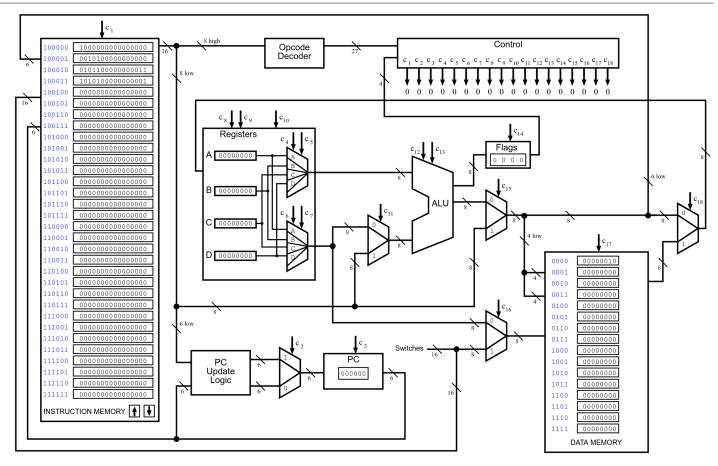
- Added INPUTD instructions
- o New download buttons with multiple downloadable files



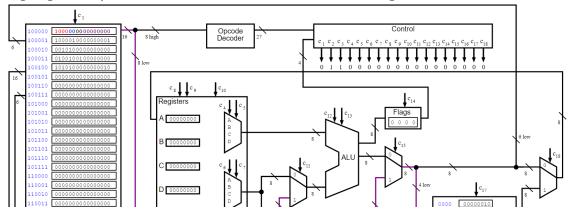
• Colby - Simulator

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- Significant changes in aligning text and placement of bus width info
- o Added new wires to visually balance Register File and corresponding mux select lines
- $\circ \;\;$  Added new buttons to go in between BIOS and User space on IMEM
- o Added ability to hide bus width info
- Added labels for IMEM and DMEM



- Aiman Verilog
  - Relegated to making pptx after completion of the Verilog conversion
  - Slides half done, pending some adjustments by the client
- Brady Simulator
  - Began work on syntax highlighting within the visualizer, current instruction is now highlighted in accordance with the assembler
    - Split up each instruction into separate parts for the opcode, registers, and immediate value
    - Read the assembly and determine how it should be colored
    - Highlight only the current instruction that is running



o Continue integration between visualizer and simulator

- Control bits are now updated accordingly
- Multiplexers are updated according to relevant control bits(see above photo, control bits max selected input)
- Bryce CPU Simulator
  - Created new functions to help the frontend team.
  - o Documented the simulator before the semester ends
- Jacob Board design
  - Debugged seven segment display updates that work with the cpu
  - Got the 3 different view modes working (memView, regView, and gameView)

## **Pending Issues**

### Eric

• INPUTDF Instruction needs to be added

### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Eric Marcanio	New functionality on the assembler	6	32
Colby McKinley	GUI updates	8	27
Aiman Priester	Slide Generation / Transistor Calculations	5	27
Brady Kolosik	Syntax highlighting in visualizer, updating certain values to match simulator, etc.	8	28.5
Bryce Snell	Documentation and new functions	6	31

### Senior Design Bi-Weekly Status Report; Fall 2020

Jacob Betsworth  Seven Segments functionality completed and debugged	8	25
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## **Plans for Upcoming Reporting Period**

### Eric -

- Add INPUTDF Display plus a register (Similar to LOADF) SLIDE 104- Lecture 39
- Data memory Address, Value, Comment
- Download assembly code
- Syntax highlighting \*\*
- Bold everything
- Three dots in the data memory when arrays are used
- Examples should be easier to read
- Add pong to the examples
- Reload page when two examples are in there fixed

### Jacob-

- Work on ability to hover over instructions in IMEM and see the instrtuction
   Aiman Continue with the pptx slides and optimizing the transistor count in the processor.
   Bryce -
- Transition to helping the frontend team finish graphics
- Handle any new features that are needed in the simulator

#### Colby -

Finalize GUI layout

### Brady-

- Start in lower 32 vs upper 32
- Format header
- Finish animating core parts of simulator
- Show bryce the ropes of our code and what we've been doing
- Look into showing assembly when (clicking?) on machine code
- Reload button
- Nomenclature considerations