MEMORANDUM

Date: November 8, 2020 To: CSS 422, Autumn 2020

From: Sean Miles, Luo Leng, Gabriel Acuna, Jayden Fullerton

Subject: Team Progress Report 2

Work Completed

- Meet to discuss and set expectations and team values

- Developed plan and delegated tasks for future of the project

- Created table connecting machine code to opcode

- Created flowchart to determine what command is being issued

Problems

- Personal time conflicts

- Time conflict with each-other's courses

Work Scheduled

Task	Temporary Completion Date
Organize Team	Complete
Development Plan/Task Delegation	Complete
Design/Implement Tests	11/9/2020
Design Skeleton for Proper I/O Management	11/12/2020
Decode NOP	11/16/2020
Decode other op-codes	11/23/2020
Decode effective addressing modes	11/30/2020
Testing/Debugging + Final Polishing	12/7/2020
Personal Statements	12/9/2020

Evaluation

Have not started coding yet, only commits are putting the initial project team submission into GitHub (commits shown in Figure 1).

Every team member contributed in the creation of the diagrams.

Figure 1: Github Commit history of our project

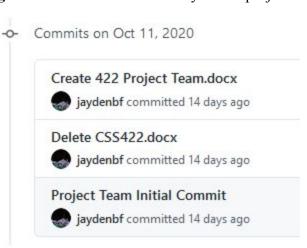


Figure 2: Table showing opcodes and their connected machine code instructions from the manual

NOP	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
1101	0	1	0	0	1	1	1	0	0	1	1	1	0	0	0	1	
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	15 D0	14 D1	13 D2	12 D3	11	10 D5	9 D6	8 D7	7	6 A1	5 A2	4 A3	3 A4	2 A5	1 A6	0	
		DI	UZ	D3	D4	D5	D6	D/	A0	AI	AZ	A3	A4	A5	Ab	A7	
ADD	45	4.4	42	12	44	10	9	0	7	6	_	4	2	2	4	0	
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1,01	0	1	0	0	0			0 SIZE		EFFECTIVE A				ADDRESS			
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LSL*	15	14	13	12	11	10		8	7	6	5	4	3	2	1	0	
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ASR*	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
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	32-BIT DISPLACEMENT IF 8-BIT DISPLACEMENT = \$FF																
JSR	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
	0	1	0	0	1	1	1	0	1	0	EFFECTIVE ADDRESS MODE REGISTER						
RTS	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
KIB	0	1	0	0	1	1	1	0	0	1	1	1	0	1	0	1	
BRA	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
	0	1	1	0	0	0	0	0			8-BIT DISPLACEMENT						
		16-BIT DISPLACEMENT IF 8-BIT DISPLACEMENT = \$00															
		32-BIT DISPLACEMENT IF 8-BIT DISPLACEMENT = \$FF															

^{*8}th bit modified because we will always be shifting in a specified direction

^{**}EA means LEA? I couldn't find EA in the manual

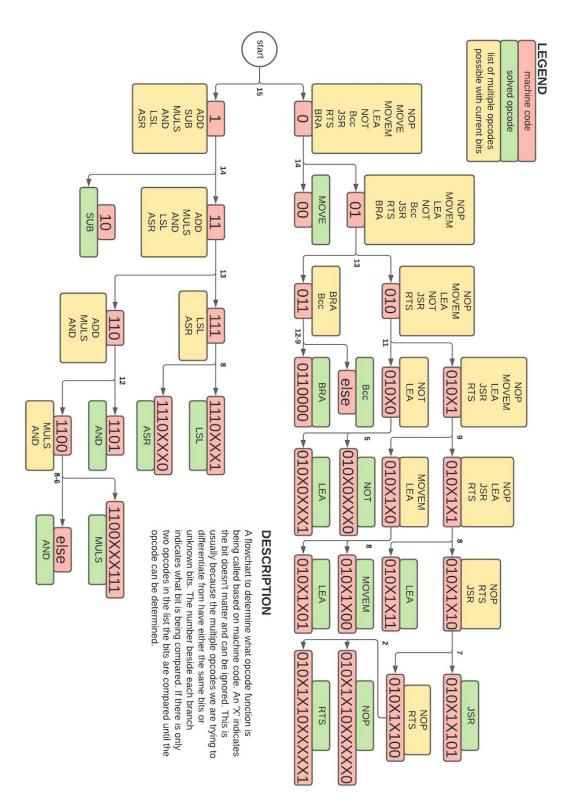


Figure 3: Flowchart for determining what command is being used based on machine code.