## Task Breakdown Report

by Team A: Orpal Nagra, Yuun bum Lim, Gihwan (Kris) Kwon

## **Tasks**

We worked on our project differently than most other groups. Rather than having one EA and one Opcode person, we all worked on EA and Opcodes. There were many parts to the project, here is a breakdown of who worked on what:

- I/O- Kris: Kris worked on the I/O and also the section where I/O trickles down into decoding- he created the first level filter for branching to appropriate decode functions for the required supported operands. He created the section that reads the first eight bits and branches accordingly.
- Opcode Decoding- We all split this section up and worked on it individually. Each
  person worked on a set of functions- for example, if the first four bits were equal
  to three, there is a set of possible functions that could be a result. One person
  was designated to work on that set of functions. This was done for all possible
  functions from 0-F.
- Testing (including Test Plan)- Yuun worked on this section of the project. After completing, we needed to go back and think of different test cases to test the project and ensure that it works correctly- Yuun wrote test code, helped identify bugs, and wrote the test plan.
- Documentation:
  - Flowcharts- Everyone worked on their flowcharts for their own functions.
     In the end, we created flowcharts for the whole project- including I/O,
     string to hex and vice versa conversion, and all supported operand
     decoding- as part of our documentation that goes along with the project.
  - Final Reports (Project Description, Program Specification, Exceptions Report, Task Breakdown Report)- Orpal worked on documentation and created the reports. Kris and Yuun made additions as needed.
- A table is included below detailing tasks for each individual.
- Overview:
  - Kris: I/O, Decoding, developed functions used throughout decoding, flowcharts. Total Contribution: 40%
  - Orpal: Decoding and Documentation (reports, flowcharts)- Total Contribution: 30%
  - Yuun: Decoding, Testing, flowcharts- Total Contribution: 30%
- Kris took on a leadership role- he was our go to guy for questions about things when we didn't understand and he implemented some very important parts of the project without having to be asked. We all contributed to the project significantly and completed important tasks, however it is rare that a group is split exactly at 33%, especially for a project of this size and complexity- someone typically emerges out of the group as the main contributor and in our case it is Kris.

Task	Implement er	Time Required (Rough Estimates)	
I/O			
Kris		8hrs	
Decode and EA for the following operations:			
ORI, BCLR, CMPI	Kris	4hrs	
MOVE.B	Kris	4hrs	
MOVE.L, MOVEA.L	Kris	2hrs	
MOVE.W, MOVEA.W	Kris	2hrs	
NEG, MOVEM.W( RtoM, MOVEM.L(R toM), MULS.L, DIVS.L, MOVEM.W( MtoR), MOVEM.L( MtoR), JSR, LEA	Orpal	12hrs	
SUBQ	Orpal	1.5hr	
BRA, BCC, BCS, BVC, BGE, BLT	Kris	30 mins	
OR, DIVS.W	Orpal	2.5hr	
SUB	Orpal	1.5hr	
EOR, CMP	Yuun	2hr	
MULS.W	Yuun	1hr	
ADD, ADDA	Yuun	2hr	

ASLR, LSLR,	Yuun	10 hr	
ROLR			
Documentation			
Flowcharts	Kris	8hrs	
Flowcharts	Orpal	4hrs	
Flowcharts	Yuun	4hrs	
Program Description	Orpal	1.5 hours	
Program Specification	Orpal	1hr	
Exceptions Report	Orpal	45 mins	
Task Breakdown Report	Orpal	1 hour	
Testing			
Test Plan	Yuun	1.5 hrs	
Test Code and Bug Finding	Yuun	4 hrs	