Project Status Report Template

Project Name: **FPGA Based Stock Prediction**

Team Name: **Pythia**

Project Manager: **Clement Cole**

Team Members: **Christopher Roche, Elijah Adedapo, Enrique Torres**

Report Date: **9/22/2016**

Reporting Period: **8/29/2016 to 9/23/2016**

Management Summary

Initial research on project requirements is being conducted. Algorithms are being analyzed to see if they would meet the needs of FPGA implementation. Methods of feeding stock data to the computer system and the FPGA are being researched. Current potential algorithms that might be suitable are adaptation of genetic algorithms in stock price prediction and nearest K algorithm.

Defined milestones completed:	0 of 4 (0%)
Defined tasks completed:	0 of 0 (0%) of child tasks in work breakdown structure
Total estimated project hours used:	0 of 0 (0%)
Ahead of (or Behind) schedule by:	On schedule
Known defects:	None
Staff members on project	1 of 1 planned
Contingency hours remaining:	0% of 0 hours

Schedule

Initial estimated completion date:	May 1, 2017
Previous estimated completion date:	May 1, 2017
Current estimated completion date:	May 1, 2017

Key Milestones Table

ID	Title	Planned Completion Date	Previous Forecast Completion Date	Current Forecast Completion Date	Actual Completion Date
1	Select an algorithm for stock prediction	10/21/ 2016	N/A	10/21/2016	N/A
2	Implement algorithm in VHDL (hardware)	05/01/2017	N/A	05/01/2017	N/A
3	Implement algorithm on software	05/01/2017	N/A	05/01/2017	N/A
4	Use web server to feed stock details to the FPGA	05/01/2017	N/A	05/01/2017	N/A

Product Size

- It is too early to predict how many logical units on the FPGA will be needed for successful completion.
- It is too early to predict how much bandwidth will be required to feed stock data to the computer system and the FPGA.

Effort

Life Cycle Activity	This Reporting Period (labor-hours)		Project to Date (labor-hours)	
	Planned Effort	Actual Effort	Planned Effort	Actual Effort
Algorithm research	20 labor-hours	20 labor-hours	20 labor-hours	20 labor-hours

Cost

Life Cycle Activity	This Reporting Period		Project to Date	
	Planned Cost	Actual Cost	Planned Cost	Actual Cost
Algorithm research	$0	$0	$0	$0

Requirements Status

- Conducting initial research into stock prediction algorithms
- Conducting initial research into methods of feeding stock details into the FPGA

Top Five Risks

1. Scheduling: falling behind planned timeline
2. Requirements: may change over time
3. Hardware: FPGA may not support certain algorithms due to hardware limitations
4. Network: latency may affect the accuracy of the algorithm
5. Knowledge: learning curve involved with stock prediction will take a lot of time

Open Issues

No current open issues

Action Items

- Researching current trends in stock prediction algorithms and selecting a suitable algorithm to implement on the FPGA.
- Selected ten stocks to make predictions for:
    - Facebook
    - Apple
    - Coke
    - Tesla
    - Google
    - Twitter
    - Microsoft
    - Xilinx
    - Intel

- AMD

Defects

No current defects have been identified