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.

|  |  |
| --- | --- |
| 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