**ERP Programming Schedule & Deadlines**

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| --- | --- |
| **Date** | **Topic** |
| Wednesday, March 20th, 2024 | *Experiment Ready for Testing!* Implementation Paper Rough Draft Dissertation Presentation & Defense Submission |
| Wednesday, April 3rd, 2024 | Dissertation Proposal & Defense |
| Friday, April 5th, 2024 | *Experiment Testing Complete!*  Implementation Paper Final Draft  Dissertation Paper Rough Draft |
| Friday, April 12th, 2024 | *Experiment Project Complete!* Implementation Final Submission Dissertation Paper Final Submission |

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| --- | --- | --- |
| **Number** | **Metric & Formula** | **Units** |
| 1 | Data Error Ratio | N/A  Percentage |
| 2 | Data Precision | N/A |
| 3 | Inventory Response Time | Seconds (s) |
| 4 | System Cycle Time | Seconds (s) |
| 5 | Throughput | Seconds (s) |
| 6 | CPU Utilization | Hertz (Hz) |
| 7 | Memory Utilization | Bytes (B) |
| 8 | Disk Space Utilization | Bytes (B) |
| 9 | Transactions Per Second | N/A |

* **JANUARY 2024**1. Centralized ERP System  
   -Installation  
   -Configuration  
   -Modules: stock & inventory (plus any necessary for operation)  
   -Centralized server & database

* **FEBRUARY 2024**1. Centralized ERP System  
   -Program separate interface as console to display real-time metrics from data  
   **\*\*\*ERP System 1 Complete!**2. Decentralized ERP System  
   -Installation  
   -Configuration  
   -Modifications to source code  
   -Modules: stock & inventory (plus any necessary for operation)  
   -Decentralized server & database  
   -Setup Ethereum Test Network (Ganache)  
   -Smart Contract Development  
   -Using the Truffle framework  
   -Web3 API can call whole or parts of smart contract when necessary  
   -Program/add to separate interface as console to display real-time metrics from data (compare both systems metrics side-by-side)  
   **\*\*\*ERP System 2 Complete!**
* **MARCH 2024**

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3. System Testing & Troubleshooting  
 -Run ERP System 1 & ERP System 2 side-by-side  
 -View metrics from both systems via console on user interface  
 -Run many tests until large enough sample size is acquired  
 **\*\*\*Testing Complete!**4. Experiment Conclusion & Paper Publication  
 -Conclude experiment  
 -Transfer tests into paper format for peer review & evaluation  
 -Revise as Necessary

* **APRIL 2024**

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| Friday, April 5th, 2024 | *Experiment Testing Concludes*  Implementation Paper Final Draft  Dissertation Paper Rough Draft |
| Friday, April 12th, 2024 | Implementation Final Submission Dissertation Paper Final Submission |

4. Experiment Conclusion & Paper Publication (continued)  
 -Conclude experiment  
 -Transfer tests into paper format for peer review & evaluation  
 -Revise as Necessary  
 \*\*\***Paper Sent for Publication!**