**Project Charter**

**Part I: Project Overview**

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| **Project Name** | Crypto Bot | | |
| **Project Charter Authors** | Thomas Shank | | |
| **Creation Date** | 12/10/2023 | **Last Revision Date** |  |
| **Project Requestor** | Ross Bigelow (Or Georgian?) | | |
| **Project Manager** | Alexandr Nikitin | | |
| **Date of Approval** | 12/16/2023 | | |
| **Proposed Project Start** | 12/16/2023 | | |
| **Proposed Project End** | 3/16/2023 (End of next semester) | | |

**Part II: Stakeholders**

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| **Sponsor** | Georgian College |
| **Client** | Ross Bigelow |
| **Project Team** | Alexandr Nikitin - 200551730,  Thomas Shank - 200346862,  Peshal Nepal - 200567777 |

**Part III: Project Details**

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| **Project Objective** | A Crypto Bot that can determine the potential direction of the stock market. |
| **Project Purpose** | To test the methodology of stacking ML and DL algorithms together to discern the best times to buy and sell crypto. |
| **Project Description** | A CLI tool that utilizes multiple ML and DL algorithms in junction to provide a human interoperable output that assists in crypto related decision making. |
| **Project Requirements** | Knowledge:   * Programming (Language: Python) * Machine Learning / Deep Learning * GitHub * Agile   Physical:   * Lots of GPU processing * Potential subscriptions to market data providers if we want true data. (up to date) |
| **Project Outcomes or Benefits** | * Passive income. * Better insight into the overall sentiment of a particular asset in the crypto market. |
| **Project Scope** | Crypto API, Crypto Bot, Crypto Market, DL, ML, Model Stacking |
| **Out of Scope** | May be considered in the future depending on time constraints:   * Web based interface |
| **Project Deliverables** | A CLI based Crypto Bot that assists in passive income. |
| **Constraints/Risks** | Project difficulty, Processing capacity |
| **Assumptions** | Access to Georgian GPU cluster will be available for intraday - weekly training of the algorithm when its finished so it can stay up to date with current market data and fundamentals. |
| **Key Dependencies** | 1. GPU Cluster 2. Python Models (to be determined) 3. Training Dataset for NLP Model (that are not tweets) 4. Crypto Market Information (from market data distributors) |

**Part IV: Communications**

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| **Stakeholder** | **Message** | **Method** | **Frequency** |
| **Sponsor** | na | na | na |
| **Project Manager** |  | WhatsApp | Daily |
| **Team Members** |  | WhatsApp | Daily - Weekly |

**Part V: Project Timeline**

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| --- | --- | --- |
| **Project Timeline** | **What** | **When** |
| Receive, Understand and Clean Data. | End of Dec. |
| Discuss Analysis Model with the Client. | Start of Feb. |
| Prove Final Model. | End of Feb/Start of March |
| Project Delivery. | End of March |

**Approval Signatures**

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|  |  | Georgian College,  Department of Research and Innovation |
| Executive Director |  | Project Manager |