**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 20October 2022 |
| Team ID | PNT2022TMID43503 |
| Project Name | Natural Disasters Intensity Analysis and Classification using Artificial  Intelligence |

**Functional Requirements:**

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-  1 | **Usability** | Used for protecting infrastructure, people, social and natural environment, reliance performance and fast recovery. |
| NFR-  2 | **Security** | Artificial intelligence product helps security personnel detect threats by scanning the underside of passing vehicles. |

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | Reporting | Markets in Financial Instruments Directive  II, Monetary Authority of Singapore,  Artificial Intelligence repoorting. |
| FR-2 | Compliance to Laws or Regulations | Robust and Reliable Safe and Secure. |
| FR-3 | External Interface | Virtual agents and natural language generation. |
| FR-4 | Business Rules | support data based decisions and is not an autonomous system. |
| FR-5 | Authentication | 3D biometric facial recognition technology. |
| FR-6 | Transaction Processing | Dubbed IBM z16, Big Blue. |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

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| NFR-  3 | **Reliability** | AI can help disaster management teams assign risk scores to public and private properties, enabling them to gauge infrastructure vulnerability in the event of a catastrophe.  AI for disaster recovery would be to analyze real-time CCTV footage to identify emergencies and sound the alarm. |
| NFR-  4 | **Performance** | AI systems can detect urgency by analysing the tone of speech, filtering out redundant or even less urgent calls and sorting them depending on the seriousness of the problem. |
| NFR-  5 | **Availability** | AI software currently being used in everyday life like Voice assistants, image recognition for face unlock in cellphones, and ML-based financial fraud detection and it can be available to detect and monitor the affected areas during the pandemic time. |
| NFR-  6 | **Scalability** | Roughly 6,800 natural disasters take place every year, around the globe. It indicates that almost 68,000 people lose their lives. |