**Project Design Phase-II**

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

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| Date | 22 October 2022 |
| Team ID | PNT2022TMID39141 |
| Project Name | Project – Digital Naturalist - AI enabled tool for biodiversity researchers |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Our solution is demanded for scientific researchers as Ornithologists , Zoologists in order to predict and about flora and fauna. |
| NFR-2 | **Security** | Authentication process involves multilayer security to make user data and collected data more secured, also to avoid unknown authorization and data integrity issues. Most security methods include Encryption and Authorization. |
| NFR-3 | **Reliability** | Our framework should be reliable to cover wide range of species spanning across various habitats. |
| NFR-4 | **Performance** | Data Augmentation to increase dataset size along with transfer learning to increase accuracy and performance for better working of application. |
| NFR-5 | **Availability** | Our application possess full-time service (either offline or online) and dataset is constantly updated. |
| NFR-6 | **Scalability** | Our application supports large number of concurrent users without any hurdles or errors through scaled cloud resources. |

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 | User Registration |  Registration through Google API |
| FR-2 | User Confirmation | * Confirmation via Email * Confirmation via OTP |
| FR-3 | Transactions |  Through UPI, Credit/Debit cards and Net Banking. |
| FR-4 | Authentication | * Through OTP sent to mobile. * User created secured passwords. |
| FR-5 | Authorization |  Basic Authorization |
| FR-6 | Administrative functions |  Adding, Updating and Maintaining description data about various species. |
| FR-7 | External interfaces | * Easy to access UI * Community for discussions |

**Non-functional Requirements:**

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