

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID03402 |
| Project Name | Project – Digital Naturalist - AI enabled tool for biodiversity researchers |
| Maximum Marks | 4 Marks |

Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|--|
| FR-1 | User Registration | <ul style="list-style-type: none"> Registration through Google API |
| FR-2 | User Confirmation | <ul style="list-style-type: none"> Confirmation via Email Confirmation via OTP |
| FR-3 | Transactions | <ul style="list-style-type: none"> Through UPI, Credit/Debit cards and Net Banking. |
| FR-4 | Authentication | <ul style="list-style-type: none"> Through OTP sent to mobile. User created secured passwords. |
| FR-5 | Authorization | <ul style="list-style-type: none"> Basic Authorization |
| FR-6 | Administrative functions | <ul style="list-style-type: none"> Adding, Updating and Maintaining description data about various species. |
| FR-7 | External interfaces | <ul style="list-style-type: none"> Easy to access UI Community for discussions |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | Our solution is demanded for scientific researchers Such as Ornithologists , Zoologists in order to predict and analyse 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. |

