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

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|---|---|
| Date | 10 October 2022 |
| Team ID | PNT2022TMID30275 |
| Project Name | 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 | • Registration through Form<br>• Registration through Gmail<br>• Registration through LinkedIN |
| FR-2 | User Confirmation | • Confirmation via Email<br>• Confirmation via OTP |
| FR-3 | Transactions | • Secure through UPI ID<br>• Secure through Debit/Credit cards<br>• Secure through Net banking |
| FR-4 | Authentication | • Through Biometrics<br>• Through OTP verification<br>• Through Strong passwords |
| FR-5 | Authorization | • API Keys<br>• Basic Auth<br>• HMAC |
| FR-6 | Audit tracking | • Financial data<br>• Transaction<br>• Backup of data |
| FR-7 | Administrative functions | • Preserving, Restoring, Maintaining, and Protecting data of the species |
| FR-8 | External interfaces | • Creating community<br>• Contributors<br>• Texture, pattern, structural pattern in natural objects. |

**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 intended for wide range of users including Biologist, Naturalist, Ecologist with different goals. |
| NFR-2 | **Security** | Multiple ways of authentication to maintain user data and data about species, also avoid unauthorized access and modification. Better encryption, authentication and authorization. |
| NFR-3 | **Reliability** | Framework for creating digital devices that support the exploration of species behaviours in the wild. |
| NFR-4 | **Performance** | Transfer learning approach to improve accuracy and performance of the application. |
| NFR-5 | **Availability** | This application is available to use offline and online and also it will meet all the requirements of the users with better services. |
| NFR-6 | **Scalability** | With the help of cloud services, a greater number of users can access the application seamlessly without any interrupts or errors. |