**Project Development Phase**
**Model Performance Test**

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|---|---|
| Date | 10 November 2022 |
| Team ID | PNT2022TMID30275 |
| Project Name | Project – Digital Naturalist AI Enabled Tool for Biodiversity Researchers |
| Maximum Marks | 10 Marks |

**Model Performance Testing:**

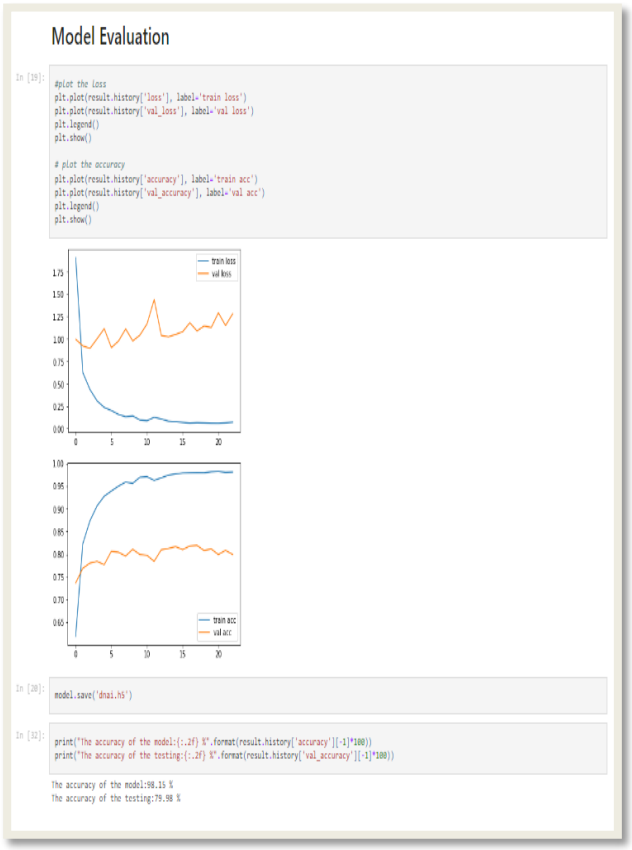
| S.No. | Parameter | Values | Screenshot |
|---|---|---|---|
| 1. | Model Summary | - |  |
| 2. | Accuracy | Training Accuracy – **98.15%**<br><br>Validation Accuracy – **79.98%** | |

**Table 9.1.1** NFT Risk Assessment

| S.No | Project Name | Scope/feature | Functional Changes | Software Changes | Load/Volume Changes | Risk Score | Justification |
|---|---|---|---|---|---|---|---|
| 1 | Digital Naturalist - AI enabled tool for biodiversity researchers | Registration | No Changes | No Changes | No Changes | No Changes | - |
| 2 | | Login | No Changes | No Changes | No Changes | No Changes | - |
| 3 | | Prediction - Animals | No Changes | No Changes | No Changes | No Changes | - |
| 4 | | Prediction - Birds | No Changes | No Changes | No Changes | No Changes | - |
| 5 | | Prediction - Marine | No Changes | No Changes | Low | <5% | Size of image takes long time to pre-process |
| 6 | | Prediction - Insects | No Changes | No Changes | No Changes | No Changes | - |
| 7 | | Prediction - Flowers | Low | No Changes | No Changes | <5% | Speed of application reduced |
| 8 | | Prediction - Leaves | No Changes | No Changes | No Changes | No Changes | - |

**Table 9.1.2.** Risk Assessment

| S.NO | Project Name | NFT Test approach | NFR - Met | Test Outcome | GO/NO-GO decision | Recommendation | Identified Defects (Detected/Closed/Open) | Approvals/signoff |
|---|---|---|---|---|---|---|---|---|
| 1 | Digital Naturalist - AI enabled tool for biodiversity researchers | Load Change | Yes | Load change Testing<br>Response time - 90ms<br>CPU Usage - 8%<br>GPU Usage - 4% | Go | - | Closed | Kishore Akash YS |
| 2 | | Functional Change | Yes | Functional Testing<br>Response time - 140ms<br>CPU Usage - 17%<br>GPU Usage - 8% | Go | - | Closed | Mythili K |

**Table 9.1.3.** NFT Detailed test plan

| S. No | Project Overview | NFT Test approach | Assumption/ Dependencies/Risks | Approvals/signoff |
|---|---|---|---|---|
| 1 | Digital Naturalist - AI enabled tool for biodiversity researchers | Load Change | Scalability of model will improve the load changes | Kishore Akash YS |
| 2 | | Functional Change | GPU enabled system can improve the speed of application | Mythili K |


**Figure 9.1.2.** Performance using Locust tool