**SECTION 1: PROJECT OVERVIEW AND REVIEW SUMMARY**

1. **Project Overview Information:**

|  |  |  |
| --- | --- | --- |
| **Programme**  **(BE / BTech / ME)** | **Branch / Specialization** | **Project Batch No. / Total No. of Batches** |
| BE | Computer Science and Engineering | 15 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Details of students (Team of maximum 4 students per Final Year Project)** | | | | |
| **S.No** | **Reg.No.** | **Name of the student** | **Contact Ph.No.** | **Email ID** |
| 1 | 111719104044 | DINESH K | 6383288980 | dine19139.cs@rmkec.ac.in |
| 2 | 111719104022 | BHARATH T | 8925293643 | bhar19120.cs@rmkec.ac.in |
| 3 | 111719104030 | BUDHARAJU SUMANTH | 7601012641 | budh19126.cs@rmkec.ac.in |

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| --- | --- |
| **Broad Area & Title of the Project** | |
| **Area** | NATURAL LANGUAGE PROCESSING |
| **Title** | ENHANCED EXTRACTION OF TEXTUAL CHARACTERS FROM MULTIMEDIA USING NATURAL LANGUAGE PROCESSING |

1. **Summary of reviews conducted:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Review No.** | **Date** | **Reviewers** | **Previous review feedbacks completed?**  **Any remarks** | **Signature of Project Guide** |
| 01 | 13.02.2023 | Dr. A. Thilagavathy,  Dr. P. Kavitha | Yes / None | https://lh5.googleusercontent.com/hJW5pr_mVsYMBaaMSH2FF9cm7Kbf3QKG7kYkDOGnm1mBs3GqgwZqz2KlQTYXKF742bI4vRJt_ebLmp8AwQLzQK5ccxhDD4ZG1DTshNLTRk04uSUXZfhLs-8PiCzMR_8NMUqb3pnu |
| 02 | 27.02.2023 | Dr. P. Kavitha,  Dr. A. Thilagavathy | Yes / None | https://lh5.googleusercontent.com/hJW5pr_mVsYMBaaMSH2FF9cm7Kbf3QKG7kYkDOGnm1mBs3GqgwZqz2KlQTYXKF742bI4vRJt_ebLmp8AwQLzQK5ccxhDD4ZG1DTshNLTRk04uSUXZfhLs-8PiCzMR_8NMUqb3pnu |
| 03 | 17.03.2023 | Dr. P. Kavitha,  Dr. A. Thilagavathy | Yes / None | https://lh5.googleusercontent.com/hJW5pr_mVsYMBaaMSH2FF9cm7Kbf3QKG7kYkDOGnm1mBs3GqgwZqz2KlQTYXKF742bI4vRJt_ebLmp8AwQLzQK5ccxhDD4ZG1DTshNLTRk04uSUXZfhLs-8PiCzMR_8NMUqb3pnu |
| 04 | 25.03.2023 | Dr. P. Kavitha,  Dr. A. Thilagavathy | Yes / None | https://lh5.googleusercontent.com/hJW5pr_mVsYMBaaMSH2FF9cm7Kbf3QKG7kYkDOGnm1mBs3GqgwZqz2KlQTYXKF742bI4vRJt_ebLmp8AwQLzQK5ccxhDD4ZG1DTshNLTRk04uSUXZfhLs-8PiCzMR_8NMUqb3pnu |

**SECTION 2: PROJECT REVIEW**

**(Add Section 2 for each review)**

1. **First Review Date:** 13.02.2023

Reviewers:

1. Dr. A. Thilagavathy

2. Dr. P. Kavitha

|  |  |  |
| --- | --- | --- |
| **No** | **Review criterion** | **Review comments** |
|  | Previous review comments considered and changes done? | yes |
| 1 | Scope: Completion status (in percentage) | 20% completed |
| 2 | Literature survey | Completed |
| 3 | Development of expertise / skills  in technical/Domain area | Improve basic knowledge on Machine Learning through online resources |
| 4 | Testing | Comparing and testing working of different algorithms |
| 5 | Verification / Validation | Analyzing and verifying algorithm suitability for the given problem statement |
| 6 | Implementation | 20% completed |
| 7 | Presentation | Completed |
| 8 | Status of attainment of PO’s | Not started |
| 9 | Status of research publication | 10% completed |
| 10 | Status of patent filing | Not started |
| 11 | Qualitative remarks | Nil |

**Project Guide Signature:**  **Date:** 27.02.2023

**SECTION 2: PROJECT REVIEW**

**(Add Section 2 for each review)**

1. **Second Review Date:** 27.02.2023

Reviewers:

1. Dr. P. Kavitha

2. Dr. A. Thilagavathy

|  |  |  |
| --- | --- | --- |
| **No** | **Review criterion** | **Review comments** |
|  | Previous review comments considered and changes done? | yes |
| 1 | Scope: Completion status (in percentage) | 60% completed |
| 2 | Literature survey | completed |
| 3 | Development of expertise / skills  in technical/Domain area | Development of module using python packages |
| 4 | Testing | Testing efficiency and accuracy of application using 3 different algorithms |
| 5 | Verification / Validation | Verification of accuracy and performance metrics |
| 6 | Implementation | 60% completed |
| 7 | Presentation | completed |
| 8 | Status of attainment of PO’s | Not started |
| 9 | Status of research publication | 80% completed |
| 10 | Status of patent filing | Not started |
| 11 | Qualitative remarks | Nil |

**Project Guide Signature:**  **Date:** 27.02.2023

**SECTION 2: PROJECT REVIEW**

**(Add Section 2 for each review)**

1. **Third Review Date:** 17.03.2023

Reviewers:

1. Dr. A. Thilagavathy
2. Dr. P. Kavitha

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| --- | --- | --- |
| **No** | **Review criterion** | **Review comments** |
|  | Previous review comments considered and changes done? | yes |
| 1 | Scope: Completion status (in percentage) | 90% completed |
| 2 | Literature survey | completed |
| 3 | Development of expertise / skills  in technical/Domain area | Gaining knowledge on machine learning model that develops the dataset for the python module |
| 4 | Testing | Testing application with different inputs |
| 5 | Verification / Validation | Verification of accuracy of input data and predicted output |
| 6 | Implementation | 90% completed |
| 7 | Presentation | Completed |
| 8 | Status of attainment of PO’s | 90% reached |
| 9 | Status of research publication | 100% completed |
| 10 | Status of patent filing | Not started |
| 11 | Qualitative remarks | Nil |

**Project Guide Signature:**  **Date:** 17.03.2023

**SECTION 3: PROJECT FINAL REVIEW**

1. **Final review comments:** 25.03.2023

Reviewers:

1. Dr. A. Thilagavathy

2. Dr. P. Kavitha

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| --- | --- | --- |
| **PO No.** | **Description** | **How the Outcome was achieved**  **(Each in 10 words)** |
|  | Project completion as per plan at the beginning of the project | 100% completed |
|  | 1. Scope | The proposed system predicts the texts from the input image with 99.39% accuracy |
|  | 1. Testing | Accuracy of each algorithm is tested with the test dataset and the best algorithm is chosen |
|  | 1. Verification / validation | Performance metrics and predicted output are verified |
|  | 1. Implementation | Process starts with detecting the text from the images, recognizing the text from the detected region, followed by summarization of texts and to translate the text into different languages and at last it can speech through the python library. |
| PO 1 | Engineering Knowledge | Improve knowledge on Machine Learning and NLP through online resources |
| PO 2 | Problem Analysis | Brainstorming and browsing |
| PO 3 | Design/development of solutions | Developing a solution using unsupervised machine learning algorithms by predicting different packages used by python |
| PO 4 | Conduct investigation of complex problems | Literature reviews and online search |
| PO 5 | Modern tool usage | Anaconda with Jupyter Notebook, VS code |
| PO 6 | The engineer and society | Improve text detection with summarization of contents. |
| PO 7 | Environment and sustainability | Does not use external disposable components. |
| PO 8 | Ethics | Better profit for visual impairment of peoples |
| PO 9 | Individual and team work | Brainstorming, collaboration, meet |
| PO 10 | Communication | Face to face and virtual |
| PO 11 | Project management and finance | Text classification management, cost management. |
| PO 12 | Life-long learning | Expansion of dataset to include multiple combination of data and generation of system in different regional languages. |
|  | Applying for patent | Through College |
|  | Applying for research proposal | Through College |
|  | Product development and IPR | Through College |
|  | Start up initiation | Through College |

General Remarks

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Project Guide Signature:  Date: 25.03.2023

HOD Signature: Date: