**“E-KETHA” : ENRICHING RICE FARMER’S QUALITY OF LIFE THROUGH A MOBILE APPLICATION.**

2022-81

Log Book

H.H.W.M.Binuka Sihan Paranagama

B.Sc. (Hons) Degree in Information Technology

Department of Computer Science and

Software Engineering

Sri Lanka Institute of Information Technology

Sri Lanka

November 2022

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H.H.W.M.Binuka Sihan Paranagama – IT19129372

Supervisor: Mr. Adeepa Gunarathna

Co Supervisor: Ms. Amali Upeka Gunasinghe

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Department of Computer Science and

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Sri Lanka

November 2022

# **DECLARATION, COPYRIGHT STATEMENT AND THE STATEMENT OF THE SUPERVISOR**

We declare that this is our own work and this proposal does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or Institute of higher learning and to the best of our knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

|  |  |  |
| --- | --- | --- |
| Name | Student ID | Signature |
| H.H.W.M.Binuka Sihan Paranagama | IT19129372 |  |

The supervisor/s should certify the proposal report with the following declaration.

The above candidates are carrying out research for the undergraduate Dissertation

under my supervision.

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Signature of the supervisor: Date:

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Signature of the co-supervisor: Date:

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# **LOGBOOK**

|  |  |  |
| --- | --- | --- |
| **Date** | **Description** | **Status** |
| 2021-Nov-7 | Searching for new ideas for the research | Work |
| 2021-Nov-15 |
| 2021-Nov-16 |
| 2021-Nov-17 |
| 2021-Nov-24 | Finalize the research topic |
| 2021-Nov-28 | Researching on similar researchers which was done related to our domain |
| 2021-Nov-29 |
| 2021-Nov-30 |
| 2021-Dec-01 | Creating the supervisor proposal document and apply for supervisors |
| 2021-Dec-10 | Checking the availability of the datasets which are related to our research |
| 2021-Dec-12 | Appling for co-supervisor  First time talking with the supervisor and brainstorming | Work/ Meet |
| 2021-Dec-13 | Registering our group details | Work |
| 2021-Dec-14 | Checking the availability of the datasets which are related to our research  Researching about our chosen topic domain |
| 2021-Dec-15 | Checking the availability of the datasets which are related to our research |
| 2021-Dec-16 |
| 2021-Dec-17 | Creating the Topic Assessment document |
| 2021-Dec-18 | Research Topic Discussion - Supervisor | Meet |
| 2021-Dec-19 | Creating the Topic Assessment document | Work |
| 2021-Dec-20 |
| 2021-Dec-24 |
| 2021-Dec-25 |
| 2022-Jan-06 | Discussing about the final component of the research - Supervisor | Meet |
| 2022-Jan-07 |
| 2022-Jan-09 | The topic was approved by the CDAP panel with minor changes requested | Work |
| 2022-Jan-11 | Make the request changes from the panel  Research project discussion - supervisor | Work/ Meet |
| 2022-Jan-12 |
| 2022-Jan-15 | Discussion about the proposal presentation - Supervisor | Meet |
| 2022-Jan-17 | Prepare the Proposal presentation | Work |
| 2022-Jan-18 |
| 2022-Jan-19 |
| 2022-Jan-21 | Research Proposal draft discussion – Supervisor  Proposal report draft preparation | Meet/ Work |
| 2022-Jan-22 | Proposal report draft preparation | Work |
| 2022-Jan-23 |
| 2022-Jan-24 |
| 2022-Jan-29 |
| 2022-Jan-30 |
| 2022-Jan-31 | Research Project proposal presentation discussion – Supervisor  Proposal report draft preparation | Meet/ Work |
| 2022-Feb-01 | Project proposal presentation discussion – Supervisor | Meet |
| 2022-Feb-03 | Project proposal presentation discussion – Supervisor  Researching on CNN algorithm types | Meet/ Work |
| 2022-Feb-06 | Researching on object detection vs image classification algorithms | Work |
| 2022-Feb-07 |
| 2022-Feb-08 | Project proposal presentation discussion – Supervisor | Meet |
| 2022-Feb-09 |
| 2022-Feb-10 | Project proposal presentation discussion – Supervisor  Project proposal submission and plagiarism check | Meet/ Work |
| 2022-Feb-11 | Project proposal presentation discussion – Supervisor  Project proposal submission and plagiarism check | Meet/ Work |
| 2022-Feb-17 | Research project discussion – Supervisor | Team |
| 2022-Feb-24 | Implement Gitlab and Team planner for the research | Work |
| 2022-April-07 | Preparing the status document - 01 |
| 2022-April-09 | Requesting data gathering permission from CDAP |
| 2022-April-10 | Discuss about the research dataset gathering – Supervisor | Meet |
| 2022-April-13 | Status document submission | Work |
| 2022-April-18 | Research on how to connect the ML model to android application |
| 2022-April-22 | Training the models |
| 2022-April-23 |
| 2022-May-05 | Research project modal progress discussion - Supervisor  Research on image classification methods | Meet/ Work |
| 2022-May-06 | Research on image classification methods | Work |
| 2022-May-07 |
| 2022-May-08 | Training Models |
| 2022-May-09 |
| 2022-May-10 |
| 2022-May-11 | Preparation for Progress presentation - 01 |
| 2022-May-16 | Progress presentation 01 discussion – supervisor | Meet |
| 2022-May-19 |
| 2022-May-22 | CNN models optimization | Work |
| 2022-May-23 | Preparation for Progress presentation - 01 |
| 2022-May-24 |
| 2022-May-25 | Progress presentation - 01 | Work |
| 2022-June-26 | Research discussion - Supervisor | Meet |
| 2022-June-28 | Creating the conference paper | Work |
| 2022-June-29 |
| 2022-June-30 |
| 2022-July-05 | Image classification using Deep learning model |
| 2022-July-10 |
| 2022-July-11 | Create the wireframes for application |
| 2022-July-23 | Compete the basic functionality of the app  Tring to customize the model predictions |
| 2022-July-24 | Tring to customize the model predictions |
| 2022-July-31 | Model training and integrating model with the application |
| 2022-Aug-07 | Research paper preparation |
| 2022-Aug-14 |
| 2022-Aug-15 |
| 2022-Aug-17 | Getting the feedback for the research paper - Supervisor | Meet |
| 2022-Aug-18 | Research paper preparation | Work |
| 2022-Aug-19 |
| 2022-Aug-20 |
| 2022-Aug-21 |
| 2022-Aug-28 |
| 2022-Aug-29 |
| 2022-Aug-30 | ICAC submission |
| 2022-Sep-02 | Research paper discussion – Supervisor | Meet |
| 2022-Sep-03 | Appling for other research journals | Work |
| 2022-Sep-05 |  |
| 2022-Sep-07 | Received the research paper approval from the IJCA journal  Final report discussion - Supervisor | Work/ Meet |
| 2022-Sep-08 | Final report draft preparation | Work |
| 2022-Sep-09 |
| 2022-Sep-13 | Research paper publication discussion – Supervisor | Meet |
| 2022-Sep-14 | Requesting information about the research paper selected journals | Work |
| 2022-Oct-05 | Preparation for progress presentation - 02 |
| 2022-Oct-07 | Preparation for progress presentation – 02  PP2 discussion – Supervisor | Work/ Meet |
| 2022-Oct-08 | Preparation for progress presentation – 02  Poster creation |
| 2022-Oct-09 | Preparation for progress presentation – 02  Integrate the application |
| 2022-Oct-10 | PP2  PP2 discussion – Supervisor |
| 2022-Oct-18 | Research paper publication payment discussion – Supervisor | Meet |
| 2022-Oct-19 | Finalize the camera-ready copy  Make the required paper | Work |
| 2022-Oct-20 | Publish the research paper |
| 2022-Oct-21 | Final report |
| 2022-Nov-01 | Research web development |
| 2022-Nov-02 |
| 2022-Nov-03 |
| 2022-Nov-05 |
| 2022-Nov-06 | Complete the research web |