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|  | **Sri Lanka Institute of Information Technology** |

PROJECT REGISTRATION FORM

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(This form should be completed and submitted on or before 3.00 PM, 2nd August, 2019)

The purpose of this form is to allow final year students of the B.Sc. (Hons.) degree program to enlist in the final year project group. Enlisting in a project entails specifying the project title and the details of four members in the group, the internal supervisor (compulsory), external supervisor (may be from the industry) and indicating a brief description of the project. The description of the project entered on this form will not be considered as the formal project proposal. It should however indicate the scope of the project and provide the main potential outcome.

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| PROJECT TITLE | Online Market Place for Organic Foods Using Blockchain |

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| RESEARCH GROUP | Artificial Intelligence and Machine Learning |

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| PROJECT NUMBER | 10 | (will be assigned by the lecture in charge) |

PROJECT GROUP MEMBER DETAILS: (Please start with group leader’s details)

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|  | STUDENT NAME | STUDENT NO. | CONTACT NO. | EMAIL ADDRESS |
| 1 | H.D.M. Perera | IT16122956 | 0752751777 | dilshan.perera123@my.sliit.lk |
| 2 | D.K.G.S.H. Liyanage | IT16175358 | 0719333930 | shanuka.liyanage@my.sliit.lk |
| 3 | D.S.M. Mallikarachchi | IT16235298 | 0778192287 | it16235298@my.sliit.lk |
| 4 | A.W.M.J.S. Bandara | IT15145994 | 0710168303 | it15145994@my.sliit.lk |

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| SUPERVISOR | | |
| Dr. Dharshana Kasthurirathna |  | 16/08/2019 |
| Name | Signature | Date |

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| CO-SUPERVISOR (will be assigned by the Supervisor, if necessary) | | |
| Mr. Prasan Yapa |  | 16/08/2019 |
| Name | Signature | Date |

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| EXTERNAL SUPERVISOR (if any, may be from the industry) | | | | | |
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| Name | Affiliation | Contact Address | Contact Numbers | Signature/Date |

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| ACCEPTANCE BY CDAP MEMBER | | |
|  |  |  |
| Name | Signature | Date |

PROJECT DETAILS

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| Brief Description of your Research Problem: |
| One of the main reasons to lack efficiency in traditional food supply chain is existence of many intermediaries between the farmers and food processing companies/Supermarket and again between food processing companies and the consumers, which result in greater complexity and lower efficiency in food supply chain. Lack of mutuality and cooperation between the members involved in food supply chain is also the one of the main reasons behind the inefficiency in supply chain management. The supply chain is still unable to trace the source of illegal activities such as fake commodities, illegal labor and money laundering. A proper supply chain management requires better understanding and co-operation among its members from upward stream to downward stream such that problems relating to supply and demand could be minimized.  Other Reason is when People have no idea about a product, they going to read comments one by one. So, reading comments is time consuming So our solution provides a product review based on the Comments (Related to Price/Freshness/Days on the Market) |
| Description of the Solution:  Our solution is to develop a web application in order to record supply chain related details beginning from manufacturer to customer using blockchain technology in order to reduce intermediaries throughout the supply chain process and also, customers can visit the web application and place their orders according to their preferences while looking to the supply chain of related products.  Furthermore, customers able to scan the QR codes stick on the products which redirect to a web page which holds product’s supply chain details.  Customers can comment on products which they like to consume & according to those comments, a review is provide on those comments by using “Sentiment Analysis”. |

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| Main expected outcomes of the project: |
| * Store the Supply chain Details in a Block chain so no one can update or delete any information related to a product. * Give the customers an opportunity to find fresh (Freshness is estimates according to the Days of Transportation), organic products with ease by ensuring that all steps from food production to delivering it to the customer are transparent and reliable. * Suppliers will have an Optimal Path to deliver the products to consumers which is generated through the system. * Customers can comment in Sinhala and English both on products which they like to consume and System will be detect which comments are legal or fake provided by users and Fake comments will be capitalized. * According to those **Legal** comments, a review is provided on those by using “Sentiment Analysis Technique”. (Related to price/quality etc.). |

WORKLOAD ALLOCATION (Please provide a brief description about the workload allocation)

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| MEMBER 1 | H.D.M. Perera (IT16122956) |
| * Storing all Related Details of the products in a Blockchain by ensuring all steps from food production to delivering it to the customer. | |

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| MEMBER 2 | D.S.M Mallikarachchi (IT16235298) |
| * Develop Technique to find the optimal path by analyzing the time, destination, cost and some other constraints to produce an optimal route for suppliers to deliver the products to the consumers. | |

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| MEMBER 3 | D.K.G.S.H. Liyanage (IT16175358) |
| * Develop a Technique to determine if the Provided Comments are Legal or Fake one and Fake comments will be capitalized to the consumers. | |

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| MEMBER 4 | A.W.M.J.S. Bandara (IT15145994) |
| * Develop a review System using “Sentiment Analysis Technique” based on the Legal Comments provided by the Customers for Every Product. | |

DECLARATION

“We declare that the project would involve material prepared by the Group members and that it would not fully or partially incorporate any material prepared by other persons for a fee or free of charge or that it would include material previously submitted by a candidate for a Degree or Diploma in any other University or Institute of Higher Learning and that, to the best of our knowledge and belief, it would not incorporate any material previously published or written by another person in relation to another project except with prior written approval from the supervisor and/or the coordinator of such project and that such unauthorized reproductions will construe offences punishable under the SLIIT Regulations.

We are aware, that if we are found guilty for the above-mentioned offences or any project related plagiarism, the SLIIT has right to suspend the project at any time and or to suspend us from the examination and or from the Institution for minimum period of one year”.

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|  | STUDENT NAME | STUDENT NO. | SIGNATURE |
| 1 | H.D.M. Perera | IT16122956 |  |
| 2 | D.K.G.S.H. Liyanage | IT16175358 |  |
| 3 | D.S.M. Mallikarachchi | IT16235298 |  |
| 4 | A.W.M.J.S. Bandara | IT15145994 |  |