

# **Sri Lanka Institute of Information Technology**

## PROJECT REGISTRATION FORM

(This form should be completed and uploaded to the Cloud space on or before XXXXXXXXX)

The purpose of this form is to allow final year students of the B.Sc. (Hon) 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.

PROJECT TITLE (As per the accepted topic assessment form)	E-commerce platform for the farmers		
RESEARCH GROUP (as per the Topic assessment Form)	Artificial Intelligence and Machine Learning		
PROJECT NUMBER	(will be assigned by the lecture in charge	e)	

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

Format	STUDENT NAME	STUDENT NO.	CONTACT NO.	EMAIL ADDRESS
Torriat				
1	Jayaraman Rajagopalasarma	IT16037984	0778065165	<u>it</u> 16037984@my.sliit.lk
2	ManIkavasagar Anjanan	IT18186048	0770581095	it18186048@my.sliit.lk
3	Keeyani Sivagnanam	IT18179118	0776902328	lt18179118@my.sliit.lk
4	Lathusha Sritharan	IT18181784	0771183638	it18181784@my.sliit.lk

### SUPERVISOR, CO\_ SUPERVISOR Details

SUPERVISOR Name	CO-SUPERVISOR Name	
Ms.Anjali gamage	Mr.Dammika De silva	
Signature	Signature	
anjalie.g@sliit.lk	dhammika.d@sliit.lk	
Date	Date	

**EXTERNAL SUPERVISOR Details** (if any, may be from the industry)

				Attach the email as Appendix 3
Name	Affiliation	Contact Address	Contact Numbers	Signature/Date

L			
	Name	Signature	Date
	-	3	

### **PROJECT DETAILS**

Brief Description of your Research Problem: (extract from the topic assessment form)

There is no online platform to help farmers to communicate with each other. And further, they might face difficulties when deciding the price range on an online platform. Some farmers don't which product to cultivate and what product gives them more profit. Sometimes what happens is many farmers cultivate the same product from the same place so the price will go down. So our research focuses on these problems that farmers may face. Every day the price of the vegetables will change. So farmers can't give a fixed price when selling them. And sometimes farmers set the price very high that not fair to buyers.

Description of the Solution: (extract from the topic assessment form)

We hope to build an android based mobile e-commerce app which uses machine learning to help farmers and users to use the system easily. We use voice recognition to easily search vegetables for users and tools for farmers. Farmers can sell/rent their used tools to another farmer using our platform. And further difficulties can be reduced by chatbot which can deliver an answer to anybody who needs help in identifying the name of the product they don't know by just providing the description of the product.

Our system will give reasonable price to vegetables dynamically according to market price and demand.

# Main expected outcomes of the project: (extract from the topic assessment form)

In the current situation, farmers face a lot of issues and have to spend more time to get basic financial and technical support. So it is important for farmers to reduce their costs. In order to do that we create an efficient online platform where they can sell and buy vegetable and old tools, find a recommendation of vegetable crops which are more profitable to them. When you sell the vegetable system will give a suitable price that fair to buyer and seller.

And also some other users might not know the exact name of the tools they use in-order to sell it. These kinds of problems may lead to difficulties in selling and buying tools used for agriculture and farming.

So we hope to provide a mobile App that can solve these problems and make it user-friendly for farmers to use. Using the App farmers can sell or buy tools.

And we provide chatbot for users who don't know the names of the products but has some description about it, so they can find what they want.

# WORKLOAD ALLOCATION (extract from the topic assessment form after correcting the suggestions given by the topic assessment panel.)

(Please provide a brief description about the workload allocation)

Jayaraman.R

### Vegetable recommendation

Sometimes seasonal vegetable also has a low price due to excessive production. So, some farmers don't get the profit. We can giving a solution by give a suggestion of which vegetables to cultivate. We can predict vegetable prices according to the season, demand, and place. In the app, we get the farmer's location, current time, and then we can list the top profitable vegetable to the farmer. So, the farmer can make a profit easily.

Anjanan.M

### **Dynamic pricing**

Farmers can't set a fixed price to the system when selling vegetables. Because the vegetable price will change every day. Another issue is sometimes farmers will set high or low prices. So the system should be smart enough to give a good solution to farmers and buyers. The system will analyze according to demand, season, and location to give a reasonable price that fair to farmer and buyer.

Keeyani.S

#### Chatbot

If a farmer does not know the product name but has some idea then the farmer can type some keywords of his/her problem through the chatbot. Then the system will do NLP and suggest the available products to farmers. Farmers will surprise that Chatbot is able to understand their complex problems. Because it will be flexible and user-friendly.

Lathusha.s

Speech recognition

Elderly farmers may find it difficult to type. Speech recognition is used to identify words that are trained with tools names. By training in this way, we can increase the accuracy of voice recognition. So a farmer can easily use the system by using this voice recognition without having any difficulties.

### DECLARATION (Students should add the Digital Signature)

"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".

	STUDENT NAME	STUDENT NO.	Signature
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2	Manikavasagar Anjanan	IT18186048	Andre
3	Keeyani Sivagnanam	IT18179118	2 Keeymi
4	Lathusha Srith	IT18181784	S. Lathusha

# **Appendix**



