Sri Lanka Institute of Information Technology

PROJECT REGISTRATION FORM

(This form should be completed and submitted on 31st January and 1st February 2019 as per the schedule)

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	Smart Traffic Identifying and Controlling System Using GPS

RESEARCH DOMAIN	ICT and Others ,Information security

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

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

	STUDENT NAME	STUDENT NO.	CONTACT NO.	EMAIL ADDRESS
1	Kavindu Geesara	IT16008106	0711927017	kavindugp@gmail.com
2	Kaveen Gunawardana	IT16145276	0777484383	ckaveen17@gmail.com
3	Savidya Dhanushki	IT16048638	0712163273	savidyadwijewickrama@gmail.com
4	T.A Nipun Sachinthana	IT16119390	077825002	nipun.sachinthana146@gmail.com

SUPERVISOR

Shashika Lokuliyana		
Name	Signature	Date

CO-SUPERVISOR (will be assigned by the Supervisor, if necessary)

Name	Signature	Date

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

Name	Affiliation	Contact Address	Contact Numbers	Signature/Date

ACCEPTANCE BY CDAP MEMBER

Name	Signature	Date

PROJECT DETAILS

Brief Description of your Research Problem:

With current's traffic is an immense issue for human everyday life. Thus, there are financial issues, formative issues and so forth. Now a day most of the drivers use Google map for getting idea of the traffic. But the Google map doesn't give a clear idea of traffic as well as some details are wrong. Also, there is no methodology to advise driver to travel a route by way of route traffic.

Additionally, there is no component to enable an emergency vehicle to land at a traffic blockage.

Description of the Solution:

For the above mention issue We make a product that finds them and introduces it in every vehicle. When every one of the clients have registered there, the vehicle's impression is recorded on a web application directly from the occasion.

It also creates a commonly web map of how to walk. The driver can obtain a clear understanding of the traffic congestion. Another important feature is showing the driver to arrive at the destination on a low Traffic. Also, at some point, we can find information about a vehicle, by an id key. An additional feature of this is the introduction of a strategy to match the safety of the vehicle. AS well as It shows the weather ahead of the course. Because of the heavy traffic in the weather conditions too. The owner will be informed if the vehicle is renewed without the owner's permission. This exchange of information is very safe. Because each of these points is personal.

At the junction, an emergency vehicle identification system is formed with IR rays.

Main expected outcomes of the project:

The Expected result of the venture is a web Application and Android Application for recognizing vehicles Traffic. It will reduce traffic congestion and quickly reach the destination. It saves man's time and makes everyday life easier.

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

MEMBER 1	Kaveen Gunawardana

Make Traffic light system using Raspberry PI
Getting data from Android app using GPS
Analyze data from Android app
Backup previous data
Pass the fully motional data for Android app

Server Side of the System

MEMBER 2	Nipun Sachinthana

Pass the data for web app using API
Getting data from web App
Generate map including all vehicles details
Suggest low traffic roads
Consideration of weather and Awareness of the driver

Client Side of the System

MEMBER 3	Kavindu Geesara

Evaluate the best existing secure data transmission methods and compare those for finding the most suitable method for our system.

These things will be considered when selecting the method

- Speed and security

Implement the system using the selected method.

Finding the best ways to protecting the confidential details of the users and compare these methods for evaluating most suitable way to protect server details from unauthorized accesses. Implement the selected security mechanism for server.

Implementing other access control mechanisms for the system.

Implement two Factor Authentication

Server and Client both side's Data protection using the best Mechanisms

MEMBER 4	Savidya Dhanushki
Make Traffic light system using Raspberry PI Create IR and Emergency vehicle's horn identifying sensor Practice identify horn identifying sensor(Data training) Pass the data for traffic light system	

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".

	STUDENT NAME	STUDENT NO.	SIGNATURE
1	Kavindu Geesara	IT16008106	
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3	Savidya Dhanushki	IT16048638	
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