**Sri Lanka Institute of Information Technology**

## PROJECT REGISTRATION FORM

(This form should be completed and submitted on or before 11.55 PM, Friday 17<sup>th</sup> January, 2020)

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) | Public Awareness using Game Based Learning |
|---|---|

| RESEARCH GROUP (as per the Topic assessment Form) | ICT for Development |
|---|---|

| PROJECT NUMBER | 2020-054 | (will be assigned by the lecture in charge) |
|---|---|---|

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

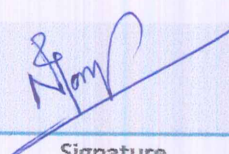| | STUDENT NAME | STUDENT NO. | CONTACT NO. | EMAIL ADDRESS |
|---|---|---|---|---|
| 1 | Dassanayake D.K.M.P.M.M (GROUP LEADER) | IT17160308 | 0710534321 | pavithramoditha@gmail.com |
| 2 | S.N Wijesinghe | IT17013642 | 0712263399 | sandali.nw@gmail.com |
| 3 | T.L.C Jayasiri | IT17701174 | 0766561690 | lisarajayasiri@gmail.com |
| 4 | K.A.R.T Keenawinna | IT17162142 | 0776677338 | ruwintharanga@gmail.com |

## SUPERVISOR Details

| Dr. (Mrs.) Windhya Rankothge | | 22/01/2020 |
|---|---|---|
| Name | Signature | Date |

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

| Miss Narmada Gamage | | 22/01/2020 |
|---|---|---|
| Name | Signature | Date |

## EXTERNAL SUPERVISOR Details (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: (extract from the topic assessment form)**

According to the information gathered by the divisional secretariat, the main problems faced by Sri Lankans are related to health, environment, safety, and cyber security. Apart from the risk associated with these problems, the main challenge is making the public aware of these problems. Even though there are public awareness programs on these problems, they are not very effective bored as well as complex, therefore the public faced difficulties in understanding how they should respond to public problems in the society. Also there is no single public awareness game platform implemented for the four awareness components we considered. So, in this research, we are planning to use a game-based learning approach to improve the public awareness on the below four main problems:

- Health awareness game (Dengue Fever)-Dengue which is the most widespread fever in the world and day by day the number of dengue patients are increasing.

- Environmental awareness game (Garbage Disposal)-There is no proper garbage disposal method which leads to the incensement of the garbage level.

- Cyber security awareness game (Social media)-User privacy violation caused due to lack of knowledge in social media usage.

- Safety awareness game (Road Safety)-Improper road safety causing accidents and the death rate increases due to road accidents.

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

In Sri Lanka, people are not much aware about the society problems which affect for health and safety of human being. There are no proper awareness platform to inform people about health, environment, safety, and cyber security in Sri Lankan society.

As a solution, we are planning to develop a single public awareness platform (mobile app) using game-based learning with Virtual Reality (VR) technology.

The proposed Public awareness platform consists of four modules. Each module will be developing as a game, so that complete solution will be consisting of four different games. Selection of the type of game will be done using a survey which will be distributed among people of different age limits(students, employees)

- **First module is about health awareness**.
  According to this module, solution for dengue awareness will be given. We selected dengue here due to that being the most widespread fever in the world. Mainly games will aware the prevention of dengue and danger of the dengue fever.

- **Second module is about environmental awareness**.
  According to this module, solution for garbage disposal awareness will be given. We selected garbage disposal because it is one of the biggest problems faced by the society and the garbage level is increasing day by day. In here a solution for the environmental pollution, proper garbage disposal, and categorizing garbage will be done.

- **Third module is about cyber security awareness**.
  According to this module, solution for social media awareness will be given. We selected social media because everyone uses social media in this era. In here a solution for over sharing information weak password usage and user privacy violation in face book is done.

- **Fourth module is about safety awareness**.
  According to this module solution for road safety awareness will be given. We selected road safety awareness because day by day the numbers of accidents are increasing. In here a solution for road accidents is made. And awareness about pedestrian and motorist rules, identify types of accidents is also done.

End of the every tasks, game will give score to analyze how much user aware about the each modules

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

- Improving the quality of life of people by making them aware on environmental, safety, health and cyber security problems, specifically using a single game based learning platform
- Improve the thinking ability, decision making, reacting speed and recalling abilities of the players.
- Aware people about dengue fever.
- Aware people about garbage disposal.
- Aware people about social media.
- Aware people about road safety.

## WORKLOAD ALLOCATION (extract from the topic assessment form)
(Please provide a brief description about the workload allocation)

### MEMBER 1

- **Developing the health awareness platform**
- As a use case we are using dengue fever, usually we identified three stages
    - **Prevention**
    - **Response**
    - **Recovery**
- Identifying the abilities related to three stages (thinking ability, decision making, reacting speed and recalling )
- Identifying the most suitable games to be implemented (survey or any suitable methodology )
- Implementing the most suitable awareness game

## MEMBER  2

- **Developing the cyber security awareness platform**
- As a use case we will focus on how to secure private information in social media (Facebook).
- Identify the abilities required (thinking ability, decision making, reacting speed and recalling)
- Identify the knowledge required.
- Identifying the most suitable games to be implemented (survey or any suitable methodology )
- Implementing the most suitable awareness game

## MEMBER  3

- **Developing the environmental awareness platform**
- As a case studies we will focus on garbage disposal, environmental pollution and Garbage category in Sri Lanka
- Identify the abilities required and knowledge required for case studies (thinking ability, decision making, reacting speed and recalling)
- Identifying the most suitable games to be implemented (survey or any suitable methodology )
- Implementing the most suitable awareness game

## MEMBER  4

- **Developing the safety awareness platform**
- As a use case we will focus on traffic rules and regulations, prevention of accidents and road safety aware for pedestrians in Sri Lanka
- Identify the awareness abilities required and knowledge required for use cases (thinking ability, decision making, reacting speed and recalling)
- Identifying the most suitable games to be implemented (survey or any suitable methodology )
- Implementing the most suitable awareness game

## 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 |
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