GRADUATE CERTIFICATE: Intelligent Reasoning Systems (IRS)
PRACTICE MODULE: Project Proposal

Date of proposal:

26 April 2023

Project Title:

- **Project1 - ClimateBot** for raising awareness on Climate change , this is based on DialogFlow hosted on Telegram

Sponsor/Client: *(Name, Address, Telephone No. and Contact Name)*

Institute of Systems Science (ISS) at 25 Heng Mui Keng Terrace, Singapore
NATIONAL UNIVERSITY OF SINGAPORE (NUS)
Contact: Mr. GU ZHAN / Lecturer & Consultant
Telephone No.: 65-6516 8021
Email: zhan.gu@nus.edu.sg

Background/Aims/Objectives:

Project 1:
The proposed ClimateBot is designed to raise awareness and educate people on topics such as climate change, greenhouse effect, national targets of Singapore, can suggest quizzes, GHG gas, Paris Agreement, UNCC, global warming etc.

Requirements Overview:

Project1: ClimateBot

- Research ability
  - To build the climate bot I have to do research on climate change, how Singapore is strategizing to take it forward, on topics that are important for people to know, also should be able to suggest references and links for quizzes and other references.
- Programming ability
  - No programming will be needed here as we will be using Google Dialogflow to help us build a FAQ based ClimateBot
- System integration ability
  - The Dialogflow will be integrated to Telegram to reach out to the wider audience

Resource Requirements (please list Hardware, Software and any other resources)

Hardware proposed for consideration:

- Any mid range laptop and mobile (Android/Apple) will work

Software proposed for consideration:

- Chat-bots- Google DialogFlow
- Telegram Account needed

Number of Learner Interns required: (Please specify their tasks if possible)

Ideally a team of 3 people should be enough for this kind of project but due to non-availability of people on similar ideas I am taking up the projects single handedly to develop.

Methods and Standards:

Procedures	Objective	Key Activities
Requirement Gathering and Analysis	The team should meet with ISS to scope the details of project and ensure the achievement of business objectives.	1. Gather & Analyze Requirements 2. Define internal and External Design 3. Prioritize & Consolidate Requirements 4. Establish Functional Baseline
Technical Construction	· To develop the source code in accordance to the design. · To perform unit testing to ensure the quality before the components are integrated as a whole project	1. Setup Development Environment 2. Understand the System Context, Design 3. Perform Coding 4. Conduct Unit Testing
Integration Testing and acceptance testing	To ensure interface compatibility and confirm that the integrated system hardware and system software meets requirements and is ready for acceptance testing.	1. Prepare System Test Specifications 2. Prepare for Test Execution 3. Conduct System Integration Testing 4. Evaluate Testing 5. Establish Product Baseline
Acceptance Testing	To obtain ISS user acceptance that the system meets the requirements.	1. Plan for Acceptance Testing 2. Conduct Training for Acceptance Testing 3. Prepare for Acceptance Test Execution 4. ISS Evaluate Testing 5. Obtain Customer Acceptance Sign-off
Delivery	To deploy the system into production (ISS standalone server) environment.	1. Software must be packed by following ISS's standard 2. Deployment guideline must be provided in ISS production (ISS standalone server) format 3. Production (ISS standalone server) support and troubleshooting process must be defined.

Team Formation & Registration

Team Name: **Qiánzhān** **(**the idea of being at the forefront)
Project Title (repeated): • **Project1 - ClimateBot** for raising awareness on Climate change , this is based on DialogFlow hosted on Telegram •
System Name (if decided): **Project 1- ClimateBot**
Team Member 1 Name: Nilothpal Bhattacharya
Team Member 1 Matriculation Number: e1113631@u.nus.edu
Team Member 1 Contact (Mobile/Email): 83204831

For ISS Use Only		
Programme Name:	**Project No:**	**Learner Batch:**
Accepted/Rejected/KIV:		
Learners Assigned:		
Advisor Assigned: Contact: Mr. GU ZHAN / Lecturer & Consultant Telephone No.: 65-6516 8021 Email: zhan.gu@nus.edu.sg		