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

Date of proposal: 06 November 2021
Project Title: Travel Helper
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: The proposed intelligent recommendation system will help people to book the right ticket, choose the right hotel, and provide them with more places to visit, so that they can plan their travel more reasonably in the limited time.
Requirements Overview: - Research ability   - Programming ability   - System integration ability
Resource Requirements (please list Hardware, Software and any other resources) Hardware proposed for consideration: - CPU   Software proposed for consideration: - Reasoning systems: Rule-based   - Pertained machine learning models: NLP model   - Machine learning use cases: Orange3   - Deep learning tools: Python   - High level and flexible application programming interface
Number of Learner Interns required: (Please specify their tasks if possible) A team of 3 members

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: Team 1
Project Title (repeated): Travel Helper
System Name (if decided): Travel Helper
Team Member 1 Name: Liu Ding
Team Member 1 Matriculation Number: A0231429J
Team Member 1 Contact (Mobile/Email): e0703461@u.nus.edu
Team Member 2 Name: Zeng Hanyu
Team Member 2 Matriculation Number: A0231558A
Team Member 2 Contact (Mobile/Email): e0703590@u.nus.edu
Team Member 3 Name: He Mingyang
Team Member 3 Matriculation Number: A0231408N
Team Member 3 Contact (Mobile/Email): e0703440@u.nus.com

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		