Ghulam Ishaq Khan Institute of Engineering Sciences and Technology Department of Computer Science

Course Information

Course Code: CS 351L

Course Title: Artificial Intelligence Lab **Instructor:** Mr. Usama Arshad, PhD CS

Program: BS Cybersecurity

Semester: 5th

Reference for Lab Resources:

[CS 351L - AI Lab GitHub Repository]

(https://github.com/usamajanjua9/CS-351L---AI-Lab-)

Lab Task Details

Lab Task: 02

Lab Title: Introduction to search in AI: Problem spaces, states, and goals

Assigned Date: 4th September 2024

Submission Deadline: 17th September 2024

Task Type: Individual

Submission Instructions

- Make a public repository on GitHub with following name:
 CS 351L AI Lab GitHub Repository_Your_reg_no.
- Submit each completed lab task on repository and share the link to my email with screenshots of output.

usama.arshad@giki.edu.pk

• File Naming Convention: [YourName]_CS351L_Lab02.ipynb

Late Submissions: Will incur a deduction of marks unless approved in advance by the instructor.

Task Overview

In this lab task, you will extend the Treasure Hunt Game by implementing it using different game scenario. You are required to implement the following versions:

- 1. You are provided with A* implemented in the game.
- 2. You just have to come up with another game scenario and edit the provided code according to your new scenario.
- 3. You cannot make your own code from scratch, edit the provided code.
- 4. Do show all steps in output so it looks well structured.

Code Structure and Submission

- Your code should be modular and well-commented, explaining how each algorithm is being used to guess the number.
- Clearly indicate your chosen scenario.
- Include print statements to show the output clearly.