ALBUKHARY INTERNATIONAL UNIVERSITY

ASSESSMENT INSTRUCTION

Course Code	**CCC1243**	Course Name	**Artificial Intelligence**
Lecturer	**Dr Akibu Mahmoud Abdullahi**		
Semester / Year	**2/2024**	Submission Date	**27th May 2024**
Assessment	**Project**	Weightage	**100 marks (20%)**
Course Outcome	CLO3: Demonstrate practical skills of building intelligent systems (A3, PLO6).		

1. Overview:

Welcome to the group project for the AI course. This project offers you the opportunity to delve into the realm of Artificial Intelligence alongside your peers. You will collaboratively develop an Intelligent System aimed at solving a specific problem. Through this endeavour, you will apply the knowledge and skills acquired throughout the semester to address real-world challenges.

2. Project Structure:

Part 1: Project Report

In this phase, you will compile a comprehensive project report, divided into key sections:

- **Introduction**: Provide an overview of the project, outlining its objectives and scope.
- **Motivation**: Explain the significance of the chosen topic and its relevance in the field of AI. Highlight why addressing this problem matters and the potential impact of your solution.
- **Methodology**: Describe the approach you will undertake to develop the Intelligent System. This includes the algorithms, techniques, and tools you plan to employ.
- **Readings/References**: Cite relevant literature and resources that inform your project.
- **Appendix**: Include the code used in the development of the Intelligent System.

Part 2: System Development and Presentation

This phase involves the actual development of the Intelligent System based on the chosen topic. Additionally, you will prepare and deliver a presentation based on the findings and insights outlined in Part 1 of the project report.

3. **Important Deadlines:**

- **Submission Deadline:** Monday, 27 May 2024, by 11:30 am.
- **Submission Method:** Submit via eLearning and provide a hardcopy.
- **Late Submission Penalty:** Any submissions after the deadline will incur a 15% deduction of marks.

4. **Project Guidelines:**

- **Maximum Group Size:** 7 members.
- Utilize the concepts covered in the course, including regression, classification, clustering, association rules, and reinforcement learning.
- Aim for originality and creativity in your approach to problem-solving.
- Ensure thorough documentation of your methodology and code for transparency and reproducibility.

5. **Conclusion:**

This project presents an exciting opportunity for you to apply your AI knowledge in a practical setting. Collaborate effectively with your group members, leverage your collective expertise, and aim to deliver an Intelligent System that demonstrates innovation and effectiveness in addressing the chosen problem.

Best of luck with your project!

In the following sections, we set out some ideas for projects. These are merely intended to get you thinking about the range of possibilities. By providing them here, we do not mean to imply that you must select one of them.

Apply Machine Learning to a Real Data Set

You now have a solid set of Artificial Intelligence and Machine Learning tools, so why not try them out on some real data. There are many great sources of data, including the sites below, which overlap with the set of sites.

- Scikit-learn dataset: https://scikit-learn.org/stable/datasets.html
- Kaggle Datasets: https://www.kaggle.com/datasets
- UCI Machine Learning Repository: https://archive.ics.uci.edu/ml/index.php
- Datasets via AWS: https://registry.opendata.aws/
- Google's Dataset Search Engine: https://datasetsearch.research.google.com/
- Microsoft Datasets: https://msropendata.com/
- Awesome Public Dataset Collection: https://github.com/awesomedata/awesome-public-datasets
- Computer Vision Datasets: https://visualdata.io/discovery

List of Artificial Intelligence and Machine Learning Projects

We have identified a few data sets that are rich and interesting in different ways, just as inspiration. Below is a link that listed various machine learning project:

- Best Machine Learning Projects With Source Code [2023]: https://www.interviewbit.com/blog/machine-learning-projects/
- Top 50 Machine Learning Projects Ideas for Beginners in 2023: https://www.projectpro.io/article/top-10-machine-learning-projects-for-beginners-in-2021/397
- Top 310+ Machine Learning Projects for 2023 [Source Code Included]: https://data-flair.training/blogs/machine-learning-project-ideas/
- Top 20 Artificial Intelligence Projects (With Source Code): https://www.interviewbit.com/blog/artificial-intelligence-projects/
- 140 Python Projects with Source Code: https://medium.datadriveninvestor.com/140-python-projects-with-source-code-fa12c9e2aeac
- Top 45 Python Project Ideas for Beginners: https://intellipaat.com/blog/python-project-ideas-for-beginners/

- Top 47 Machine Learning Projects for 2022: https://data-flair.training/blogs/machine-learning-project-ideas/
- Machine Learning Projects for Beginners With Source Code for 2022: https://www.projectpro.io/article/top-10-machine-learning-projects-for-beginners-in-2021/397