DeepLibrary : A Digital Library enabled by AI

Abstract

This project is about developing a Digital Library enabled by AI, a Digital Library is defined *as a focused collection of digital objects, including text, video, and audio along with methods for access and retrieval, and for choice, and preservation of the collection* (Elaiess, 2017). It comes as a response due the current exponential growth of data in digital form in the golden age of 21st century and the demand of users for high quality and updated information along with methods that enable fast access to them globally at any point of time and space in their workplace.

Goals

- Leverage the learning process of students
- Enable fast access to information
- Provide higher quality and updated information
- Support students with best practices for effective learning
- Support integration with other Digital Libraries
- Apply gamefication to enhance learning

Proposed solution

The proposed system code-named *DeepLibary,* will be designed to be an open source system having as main goal : the leverage of the learning process of students, by supporting them with the right information in the right time, through advanced techniques of Data Sciences and Artificial Intelligence.

The system will be built using the client-sever architecture **MCV**.

Due the volume of the data available and its variability a NoSQL database will be used, specifically the **MongoDB.**

The main programming language will be **Python.**

The web framework to implement the **MCV** architecture will be a Python web framework named **Django.**

The main framework to support the building of Machine Learning models will be **TensorFlow**.