COLLECTING MACHINE LEARNING QUIZ DATA USING WEB SCRAPING

questios number : 88

question example : What does “AI bias” mean when used in relation to artificial intelligence?

example answers :A.The tendency of AI systems to make decisions without data,B.The unintentional discrimination in AI systems due to biased training data,C.The ability of AI systems to make decisions without human intervention,D.The ethical considerations when designing AI algorithms.

Link : [https://mcqprime.com/artificial-intelligence-mcq/]

In [2]:
```
import pandas as pd
import requests
from bs4 import BeautifulSoup
```

In [3]:
```
# Setup lấy data
quiz_items=0
def scap (url):
    global quiz_items
    headers = {'User-Agent': 'Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:80.0) Geck
    response = requests.get(url, headers=headers)
    response.encoding = 'utf-8'
    soup = BeautifulSoup(response.text, 'html.parser')
    quiz_items = soup.find_all('ol', class_='wp-block-list')
    return quiz_items

print(scap('https://mcqprime.com/artificial-intelligence-mcq/')) # test
```

[<ol class="wp-block-list">
What does “AI bias” mean when used in relation to artificial intelligenc e?
a. The tendency of AI systems to make decisions without data
b. The unintentional discrimination in AI systems due to biased training data
c. Th e ability of AI systems to make decisions without human intervention
d. The ethi cal considerations when designing AI algorithms
, <ol class="wp-block-list" start="2">
Which AI technique is often used for clustering data into groups with si milar characteristics?
a. Regression
b. Reinforcement Learning
 c. Supervised Learning
d. Unsupervised Learning
, <ol class="wp-block-list" start="3">
What function does a Recurrent Neural Network (RNN) perform in AI?</stro ng>
a. To classify images
b. To analyze text sentiment
c. To process seq uences of data with memory
d. To play board games
, <ol class="wp-block-list" start="4">
The main objective of artificial intelligence?
a. To replic ate human intelligence exactly
b. To develop computer programs that can think fo r themselves
c. To mimic human behavior without understanding
d. To solve co mplex problems using algorithms
, <ol class="wp-block-list" start="5">
What does “NLU” mean when referring to natural language?
a. Natural Language Understanding
b. Neural Language Unit
c. New Linguistic Und erstanding
d. Neutral Language Understanding
, <ol class="wp-block-list" start="6">
What is the name of the kind of AI system that can complete particular t asks at or better than human levels of proficiency?
a. Strong AI
b. Weak AI
c. Narrow AI
d. General AI
, <ol class="wp-block-list" start="7">
What is the purpose of an AI chatbot?
a. To play video game s
b. To automate routine customer service tasks
c. To generate random text<b r/>d. To translate languages
, <ol class="wp-block-list" start="8">
Which AI application involves teaching a computer to perform a task by e xample, rather than through explicit programming?
a. Supervised Learnin g
b. Unsupervised Learning
c. Reinforcement Learning
d. Machine Vision</ li>
, <ol class="wp-block-list" start="9">
What does “IoT” mean in terms of artificial intelligence?
 a. Internet of Things
b. Intelligence of Technology
c. Input of Text
d. Internet of Training
, <ol class="wp-block-list" start="10">
Which of the following is not a common application of natural language p rocessing (NLP)?
a. Sentiment analysis
b. Machine translation
 c. Image recognition
d. Chatbots
, <ol class="wp-block-list" start="11">
Why is the Turing Test used in AI?
a. To evaluate the compu tational power of a computer
b. To measure a machine’s ability to exhibit human- like intelligence
c. To assess the speed of algorithm execution
d. To determ ine if a computer can defeat a human in chess
, <ol class="wp-block-list" start="12">
Which programming language was designed for artificial intelligence and symbolic reasoning?
a. C++
b. Python
c. Lisp
d. Ruby
, <ol class="wp-block-list" start="13">
What does machine learning and AI mean when they refer to “data augmenta tion”?
a. Creating new data by generating random values
b. Increasi ng the size of the training dataset through transformations
c. Reducing the size

of the training dataset for efficiency
d. Scaling the data to fit a specific ran
ge
, <ol class="wp-block-list" start="14">
What is the name of the form of machine learning in which the algorithm
learns to predict outcomes using labeled data?
a. Supervised Learning<b
r/>b. Unsupervised Learning
c. Reinforcement Learning
d. Semi-supervised Lea
rning
, <ol class="wp-block-list" start="15">
Which AI strategy makes use of neural networks with numerous layers and
aims to mimic how people think and learn?
a. Symbolic AI
b. Evoluti
onary Computing
c. Deep Learning
d. Genetic Algorithms
, <ol class="wp-block-list" start="16">
What does “AI ethics” mean when used in artificial intelligence?
a. The study of AI algorithms
b. The design of AI systems to be ethically
neutral
c. The ethical considerations and guidelines for AI development and use<
br/>d. The use of AI for ethical decision-making
, <ol class="wp-block-list" start="17">
Which AI method is motivated by the laws of natural selection and the su
rvival of the fittest?
a. Reinforcement Learning
b. Genetic Algorit
hms
c. Deep Learning
d. Fuzzy Logic
, <ol class="wp-block-list" start="18">
What function does an AI-based recommendation system provide?<b
r/>a. To classify images
b. To optimize supply chain management
c. To sugges
t personalized content or products to users
d. To control industrial robots
, <ol class="wp-block-list" start="19">
What do you know by “named entity recognition” in natural language proce
ssing?
a. Identifying and classifying entities in text, such as names o
f people, places, and organizations
b. Analyzing sentiment in text
c. Transl
ating text from one language to another
d. Summarizing lengthy documents
, <ol class="wp-block-list" start="20">
What is the name of machine learning where the algorithm looks for patte
rns or groupings in data even when the labels are not explicit?
a. Supe
rvised Learning
b. Unsupervised Learning
c. Reinforcement Learning
d. Se
mi-supervised Learning
, <ol class="wp-block-list" start="21">
Which of the following cannot be considered a subset of AI?<br/
>a. Machine Learning
b. Natural Language Processing (NLP)
c. Expert Systems<
br/>d. Virtual Reality (VR)
, <ol class="wp-block-list" start="22">
What do you call a computer system that is capable of activities like sp
eech recognition, visual perception, and decision-making, which generally need human
intelligence?
a. Expert System
b. Neural Network
c. Turing Mach
ine
d. Supercomputer
, <ol class="wp-block-list" start="23">
Which AI strategy maximizes a payoff in an uncertain environment when ma
king decisions?
a. Genetic Algorithms
b. Reinforcement Learning<br/
>c. Expert Systems
d. Fuzzy Logic
, <ol class="wp-block-list" start="24">
What is the most popular programming language for developing AI and mach
ine learning applications?
a. C++
b. Java
c. Python
d. Ruby

, <ol class="wp-block-list" start="25">
Which of the following is not a Python module or framework for natural l
anguage processing?
a. NLTK (Natural Language Toolkit)
b. TensorFlo
w
c. SpaCy
d. Gensim
, <ol class="wp-block-list" start="26">

What is the main advantage of using convolutional neural networks in ima ge recognition work?
a. They require less training data
b. They can process text data effectively
c. They capture spatial relationships in images<b r/>d. They are more interpretable
, <ol class="wp-block-list" start="27">
Which AI application promotes vehicle delivery routes with the use of al gorithms?
a. Natural Language Processing (NLP)
b. Robotics
c. G enetic Algorithms
d. Machine Vision
, <ol class="wp-block-list" start="28">
What does the term “overfitting” mean in AI?
a. The model p erforms well on the training data but poorly on new data
b. The model is too sim ple to capture complex patterns in the data
c. The model is biased towards a spe cific class of data
d. The model is unable to learn from data
, <ol class="wp-block-list" start="28">
What is the name of the AI system which can comprehend, interpret, and p roduce human language?
a. Natural Language Processing (NLP)
b. Mach ine Vision
c. Reinforcement Learning
d. Genetic Algorithms
, <ol class="wp-block-list" start="29">
Which of the following is an example of a task requiring supervised lear ning?
a. Image classification
b. Clustering customer data
c. Tr aining a chatbot to have a conversation
d. Reinforcement learning in a game
, <ol class="wp-block-list" start="30">
What is the name of a particular type of AI system that can carry out a variety of tasks and displays intelligence similar to that of a human?
 a. Strong AI
b. Weak AI
c. Narrow AI
d. General AI
, <ol class="wp-block-list" start="31">
What does “CNN” stand for in the field of artificial intelligence?</stro ng>
a. Convolutional Neural Network
b. Common Neural Network
c. Continuo us Neural Network
d. Complex Neural Network
, <ol class="wp-block-list" start="32">
What is the name of an AI system’s ability to become more effective when additional data is made available to it?
a. Static Learning
b. Tran sfer Learning
c. Dynamic Learning
d. Incremental Learning
, <ol class="wp-block-list" start="33">
What application of artificial intelligence makes use of algorithms to e xamine and analyse visual data, frequently for tasks like object detection or facial recognition?
a. Natural Language Processing (NLP)
b. Robotics
 c. Machine Vision
d. Genetic Algorithms
, <ol class="wp-block-list" start="34">
What is the main goal of reinforcement learning?
a. To clas sify data into categories
b. To optimize a system for maximum efficiency
c. To make predictions based on historical data
d. To learn optimal actions through trial and error
, <ol class="wp-block-list" start="35">
Which AI method uses a set of rules to describe knowledge and then uses those rules to solve problems?
a. Expert Systems
b. Neural Networks
c. Genetic Algorithms
d. Natural Language Processing (NLP)
, <ol class="wp-block-list" start="36">
What is the main drawback of applying deep learning models, like Convolu tional Neural Networks (CNNs)?
a. They require a large amount of labeled data fo r training
b. They are not suitable for image recognition tasks
c. They cannot handle sequential data
d. They are computationally inefficient
, <ol class="wp-block-list" start="37">
What type of AI method is frequently used to simulate natural selection while maximizing solutions to challenging problems?
a. Supervised Learn ing
b. Reinforcement Learning
c. Genetic Algorithms
d. Unsupervised Lear

ning
, <ol class="wp-block-list" start="38">
What is the goal of a collaborative filtering-based AI recommendation sy
stem?
a. To generate content for a website
b. To provide personaliz
ed recommendations based on user behavior and preferences
c. To classify images<
br/>d. To optimize supply chain management
, <ol class="wp-block-list" start="39">
What is the process of training a model to carry out a task by giving it
examples of appropriate behavior in AI?
a. Supervised Learning
b. U
nsupervised Learning
c. Reinforcement Learning
d. Semi-supervised Learning</
li>
, <ol class="wp-block-list" start="40">
Which AI technology employs algorithms to produce text or speech that so
unds human?
a. Machine Vision
b. Natural Language Processing (NLP)<
br/>c. Speech Recognition
d. Genetic Algorithms
, <ol class="wp-block-list" start="41">
What is the phrase used to describe a machine learning model’s capacity
to generalize from the training data to make precise predictions on additional data?

a. Overfitting
b. Bias
c. Variance
d. Generalization
, <ol class="wp-block-list" start="42">
What is the name of the AI technique where several models or experts are
combined to create predictions or decisions?
a. Reinforcement Learning<
br/>b. Transfer Learning
c. Ensemble Learning
d. Deep Learning
, <ol class="wp-block-list" start="43">
Which of the following activation functions are frequently used in artif
icial neural networks?
a. Sigmoid
b. Regression
c. Fuzzy Logic<
br/>d. Principal Component Analysis (PCA)
, <ol class="wp-block-list" start="44">
What is the main benefit of applying reinforcement learning to AI for ac
tivities like playing games?
a. It requires a large amount of labeled d
ata
b. It can handle complex sequences of actions
c. It is not suitable for
real-time tasks
d. It relies on pre-defined rules
, <ol class="wp-block-list" start="45">
What is the name of the method used in AI that enables a model to still
make predictions even when portion of the input data is missing?
a. Reg
ularization
b. Imputation
c. Feature Engineering
d. Dimensionality Reduc
tion
, <ol class="wp-block-list" start="46">
Which of the following approaches is frequently used to evaluate an AI c
lassification model’s effectiveness?
a. Mean Absolute Error (MAE)
b. R-squared (R^2)
c. Confusion Matrix
d. Root Mean Square Error (RMSE)
, <ol class="wp-block-list" start="47">
What does “backpropagation” mean in AI?
a. The process of t
raining a neural network by adjusting its weights based on errors
b. The techniq
ue used for data augmentation
c. The process of encoding categorical data
d.
The method for calculating feature importance
, <ol class="wp-block-list" start="48">
What is the name of the kind of AI model, such as a self-driving car, th
at can complete tasks without constant human intervention?
a. Strong AI

b. Weak AI
c. Narrow AI
d. General AI
, <ol class="wp-block-list" start="49">
What does “cross-validation” mean in AI?
a. The process of
validating the results of a neural network
b. The process of training a model on
multiple datasets
c. The process of splitting data into training and testing set
s
d. The technique for evaluating model performance using multiple subsets of da
ta

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</ol>, <ol class="wp-block-list" start="50">
<li><strong>What is the process by which text data is transformed into a numerical r
epresentation for machine learning?</strong><br/>a. Text Analysis<br/>b. Text Mining
<br/>c. Text Encoding<br/>d. Text Embedding</li>
</ol>, <ol class="wp-block-list" start="51">
<li><strong>Which of the following is a deep learning framework that is not frequent
ly used?</strong><br/>a. TensorFlow<br/>b. PyTorch<br/>c. Keras<br/>d. Scikit-Learn
</li>
</ol>, <ol class="wp-block-list" start="52">
<li><strong>What is the primary application of a generative adversarial network (GA
N) in AI?</strong><br/>a. Image classification<br/>b. Image generation<br/>c. Natura
l language processing<br/>d. Speech recognition</li>
</ol>, <ol class="wp-block-list" start="53">
<li><strong>What is the name of the process that turns raw data into a format that m
achine learning models can use?</strong><br/>a. Data Labeling<br/>b. Data Engineerin
g<br/>c. Data Imputation<br/>d. Data Visualization</li>
</ol>, <ol class="wp-block-list" start="54">
<li><strong>Which AI algorithms are used to understand and interpret human movements
and gestures?</strong><br/>a. Speech Recognition<br/>b. Machine Vision<br/>c. Natura
l Language Processing (NLP)<br/>d. Gesture Recognition</li>
</ol>, <ol class="wp-block-list" start="55">
<li><strong>What is the primary goal of reinforcement learning in AI?</strong><br/>
a. To optimize the accuracy of predictions<br/>b. To find patterns and relationships
in data<br/>c. To learn optimal actions based on rewards and punishments<br/>d. To c
lassify data into predefined categories</li>
</ol>, <ol class="wp-block-list" start="56">
<li><strong>What is the name of the AI technique where a model is trained on one tas
k, then used for another but similar task?</strong><br/>a. Reinforcement Learning<b
r/>b. Transfer Learning<br/>c. Ensemble Learning<br/>d. Deep Learning</li>
</ol>, <ol class="wp-block-list" start="57">
<li><strong>Which of the following is an example of a generative model?</strong><br/
>a. Support Vector Machine (SVM)<br/>b. Recurrent Neural Network (RNN)<br/>c. K-Mean
s Clustering<br/>d. Principal Component Analysis (PCa.</li>
</ol>, <ol class="wp-block-list" start="58">
<li><strong>What is the main goal of natural language processing?</strong><br/>a. To
analyze and process human emotions<br/>b. To generate random text<br/>c. To understa
nd, interpret, and generate human language<br/>d. To recognize and understand visual
information</li>
</ol>, <ol class="wp-block-list" start="59">
<li><strong>Which AI approach uses rules and knowledge representation to arrive at l
ogically sound decisions?</strong><br/>a. Supervised Learning<br/>b. Expert Systems<
br/>c. Deep Learning<br/>d. Reinforcement Learning</li>
</ol>, <ol class="wp-block-list" start="60">
<li><strong>What is the name of the capability of an AI system to observe and compre
hend the spatial structure of the environment?</strong><br/>a. Natural Language Proc
essing (NLP)<br/>b. Computer Vision<br/>c. Speech Recognition<br/>d. Sentiment Analy
sis</li>
</ol>, <ol class="wp-block-list" start="61">
<li><strong>What does “bias-variance trade-off” mean in the context of AI?</strong><
br/>a. The need for more data to reduce model bias<br/>b. The balance between model
complexity and generalization<br/>c. The choice between supervised and unsupervised
learning<br/>d. The trade-off between accuracy and precision</li>
</ol>, <ol class="wp-block-list" start="62">
<li><strong>Which of the following approaches is utilized in AI to reduce dimensiona
lity?</strong><br/>a. K-Means Clustering<br/>b. Principal Component Analysis (PCa.<b
r/>c. Recurrent Neural Networks (RNNs)<br/>d. Support Vector Machines (SVMs)</li>
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</ol>, <ol class="wp-block-list" start="63">
<li><strong>What is the name of the metric used in AI to evaluate a classification m
odel’s performance?</strong><br/>a. Root Mean Square Error (RMSE)<br/>b. F1 Score<b
r/>c. Gradient Descent<br/>d. Perceptron Loss</li>
</ol>, <ol class="wp-block-list" start="64">
<li><strong>What is the name for an AI model that has been trained to accomplish a s
ingle task and cannot simply be applied to other tasks?</strong><br/>a. Strong AI<b
r/>b. Weak AI<br/>c. Narrow AI<br/>d. General AI</li>
</ol>, <ol class="wp-block-list" start="65">
<li><strong>What kind of AI method uses labeled data to divide input into predetermi
ned categories?</strong><br/>a. Reinforcement Learning<br/>b. Unsupervised Learning<
br/>c. Supervised Learning<br/>d. Semi-supervised Learning</li>
</ol>, <ol class="wp-block-list" start="66">
<li><strong>What is the procedure for reducing the dimensionality of data while main
taining its essential characteristics?</strong><br/>a. Principal Component Analysis
(PCA)<br/>b. Regression<br/>c. K-Means Clustering<br/>d. Gradient Boosting</li>
</ol>, <ol class="wp-block-list" start="67">
<li><strong>What does “chatbot” mean in terms of AI?</strong><br/>a. Chatting Robot<
br/>b. Chatter Robot<br/>c. Computer Help Assistance Technology for Browsing Online
Text<br/>d. Communication Helper Automated Technology Based on Text</li>
</ol>, <ol class="wp-block-list" start="68">
<li><strong>Which AI application uses algorithms to decode and interpret human emoti
ons from speech or text?</strong><br/>a. Sentiment Analysis<br/>b. Image Recognition
<br/>c. Autonomous Vehicles<br/>d. Fraud Detection</li>
</ol>, <ol class="wp-block-list" start="69">
<li><strong>RNN stand for <em>__</em>.</strong><br/>a. Recursive Neural Network<br/>
b. Randomized Neural Network<br/>c. Recurrent Neural Network<br/>d. Robotic Neural N
etwork</li>
</ol>, <ol class="wp-block-list" start="70">
<li><strong>What is the main advantage of using unsupervised learning in AI?</strong
><br/>a. It can make predictions based on labeled data<br/>b. It can perform image r
ecognition tasks<br/>c. It can discover hidden patterns and relationships in data<b
r/>d. It requires less computational power</li>
</ol>, <ol class="wp-block-list" start="71">
<li><strong>Which AI method is frequently applied to maximizing judgments in uncerta
in or inadequate information situations?</strong><br/>a. Reinforcement Learning<br/>
b. Supervised Learning<br/>c. Genetic Algorithms<br/>d. Fuzzy Logic</li>
</ol>, <ol class="wp-block-list" start="72">
<li><strong>How you can describe an AI system’s capacity to identify and comprehend
human speech?</strong><br/>a. Natural Language Processing (NLP)<br/>b. Speech Recogn
ition<br/>c. Audio Analysis<br/>d. Language Understanding System</li>
</ol>, <ol class="wp-block-list" start="73">
<li><strong>Which of the following open-source machine learning libraries is well-kn
own for offering tools for modeling and data analysis?</strong><br/>a. TensorFlow<b
r/>b. Keras<br/>c. PyTorch<br/>d. Pandas</li>
</ol>, <ol class="wp-block-list" start="74">
<li><strong>What is the process of optimizing a deep learning model that has already
been trained for a particular task using a smaller dataset?</strong><br/>a. Reinforc
ement Learning<br/>b. Transfer Learning<br/>c. Unsupervised Learning<br/>d. Semi-sup
ervised Learning</li>
</ol>, <ol class="wp-block-list" start="75">
<li><strong>Which AI method is employed to solve optimization problems and is modele
d after the behavior of ants, bees, and other social insects?</strong><br/>a. Reinfo
rcement Learning<br/>b. Swarm Intelligence<br/>c. Genetic Algorithms<br/>d. Expert S
ystems</li>
</ol>, <ol class="wp-block-list" start="76">
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What does “feature engineering” mean in the context of AI?
a. The process of designing user interfaces for AI applications
b. The process of selecting and transforming input data to improve model performance
c. The process of encoding rules in expert systems
d. The process of fine-tuning hyperparameters in machine learning models
, <ol class="wp-block-list" start="77">
Which method is frequently used to decrease overfitting in machine learning models?
a. Increasing the model complexity
b. Decreasing the amount of training data
c. Regularization techniques like L1 and L2
d. Removing all features except one
, <ol class="wp-block-list" start="78">
What is the name of the capability of an AI system to comprehend and analyze visual data from the real world?
a. Natural Language Processing (NLP)
b. Machine Vision
c. Reinforcement Learning
d. Genetic Algorithms
, <ol class="wp-block-list" start="79">
What is the name for a mathematical model in AI that use a system of equations to imitate the behavior of a complicated system?
a. Artificial Neural Network (ANN)
b. Genetic Algorithm (Ga.
c. Agent-Based Model (ABM)
d. Turing Machine
, <ol class="wp-block-list" start="80">
What is the name for a certain class of AI model that has been taught to forecast a continuous numerical value?
a. Classification Model
b. Regression Model
c. Clustering Model
d. Ensemble Model
, <ol class="wp-block-list" start="82">
What is the phrase used in AI to describe a model’s capacity to make decisions based on ambiguous or insufficient data?
a. Fuzzy Logic
b. Genetic Algorithms
c. Reinforcement Learning
d. Deep Learning
, <ol class="wp-block-list" start="83">
What is the name of the neural network architecture that has input, hidden, and output layers among its interconnected layers?
a. Recurrent Neural Network (RNN)
b. Convolutional Neural Network (CNN)
c. Feedforward Neural Network
d. Radial Basis Function Network (RBFN)
, <ol class="wp-block-list" start="84">
Which AI method is frequently used to divide data into groups or categories based on their similarities?
a. Reinforcement Learning
b. Clustering
c. Regression
d. Dimensionality Reduction
, <ol class="wp-block-list" start="85">
What is the name of the method used in AI that enables a model to learn from its errors and enhance its performance over time?
a. Reinforcement Learning
b. Supervised Learning
c. Unsupervised Learning
d. Semi-supervised Learning
, <ol class="wp-block-list" start="86">
What is the main objective of an AI system that does machine translation using natural language processing (NLP)?
a. To summarize text documents
b. To convert speech to text
c. To translate text from one language to another
d. To generate human-like text
, <ol class="wp-block-list" start="87">
What is the name of a particular class of AI model that may produce new data points that are comparable to current data points?
a. Discriminative Model
b. Generative Model
c. Ensemble Model
d. Reinforcement Model
, <ol class="wp-block-list" start="88">
Which of the following unsupervised learning techniques are often used for dimensionality reduction?
a. Decision Trees
b. Naive Bayes
c. Singular Value Decomposition (SVd.
d. Random Forest

```
</ol>, <ol class="wp-block-list" start="89">
<li><strong>What does the term “hyperparameter” refer in AI?</strong><br/>a. Paramet
ers learned by the model during training<br/>b. Parameters that define the structure
of the model<br/>c. Parameters used to make predictions<br/>d. Parameters related to
the loss function</li>
</ol>, <ol class="wp-block-list" start="90">
<li><strong>Which of the following is a common algorithm used for recommendation sys
tems in AI?</strong><br/>a. Naive Bayes<br/>b. Linear Regression<br/>c. Matrix Facto
rization<br/>d. Decision Trees</li>
</ol>]
```

In [4]:
```
questions = []
optionA = []
optionB = []
optionC = []
optionD = []
```

In [5]:
```
# Tách câu hỏi và đáp án
def createdata(quiz_items):
    global questions
    global optionA
    global optionB
    global optionC
    global optionD
    for item in quiz_items:
        # loại bỏ khoảng trắng
        text = item.text.strip()
        #text = text.replace('Xem đáp án', '') test web vietnam
        text = text.replace('"', '')

        # tách câu hỏi và đáp án ( đáp án bắt đầu từ a. b. c. d. ==> tách tất cả nh
        parts = text.split("a.", 1)
        if len(parts) == 2:
            # câu hỏi
            question = parts[0].strip()
            question = ' '.join(question.split())  # xoá khoảng trắng và cách dòng
            answers = parts[1]

            # đáp án
            options = answers.split("b.")
            if len(options) == 2:
                a = "A." + options[0].strip()
                rest = options[1]

                parts = rest.split("c.")
                if len(parts) == 2:
                    b = "B." + parts[0].strip()
                    rest = parts[1]

                    parts = rest.split("d.")
                    if len(parts) == 2:
                        c = "C." + parts[0].strip()
                        d = "D." + parts[1].strip()

                        questions.append(question)
                        optionA.append(a)
```

```
                        optionB.append(b)
                        optionC.append(c)
                        optionD.append(d)
    return questions, optionA, optionB, optionC, optionD
```

In [6]:
```
def createDf(quiz_items):
    global questions
    global optionA
    global optionB
    global optionC
    global optionD
    createdata(quiz_items)
    df = pd.DataFrame({
        'Question': questions,
        'Option A': optionA,
        'Option B': optionB,
        'Option C': optionC,
        'Option D': optionD
    })
    return df
```

In [7]:
```
# link 1 :  https://mcqprime.com/machine-learning-mcq/
# link 2 :  https://mcqprime.com/artificial-intelligence-mcq/
quiz_items=0
questions = []
optionA = []
optionB = []
optionC = []
optionD = []
quiz_items=scap('https://mcqprime.com/artificial-intelligence-mcq/')
df=createDf(quiz_items)
df.head(10)
```

Out[7]:

	Question	Option A	Option B	Option C	Option D
0	What does “AI bias” mean when used in relation...	A.The tendency of AI systems to make decisions...	B.The unintentional discrimination in AI syste...	C.The ability of AI systems to make decisions ...	D.The ethical considerations when designing AI...
1	Which AI technique is often used for clusterin...	A.Regression	B.Reinforcement Learning	C.Supervised Learning	D.Unsupervised Learning
2	What function does a Recurrent Neural Network ...	A.To classify images	B.To analyze text sentiment	C.To process sequences of data with memory	D.To play board games
3	The main objective of artificial intelligence?	A.To replicate human intelligence exactly	B.To develop computer programs that can think ...	C.To mimic human behavior without understanding	D.To solve complex problems using algorithms
4	What does “NLU” mean when referring to natural...	A.Natural Language Understanding	B.Neural Language Unit	C.New Linguistic Understanding	D.Neutral Language Understanding
5	What is the name of the kind of AI system that...	A.Strong AI	B.Weak AI	C.Narrow AI	D.General AI
6	What is the purpose of an AI chatbot?	A.To play video games	B.To automate routine customer service tasks	C.To generate random text	D.To translate languages
7	Which AI application involves teaching a compu...	A.Supervised Learning	B.Unsupervised Learning	C.Reinforcement Learning	D.Machine Vision
8	What does “IoT” mean in terms of artificial in...	A.Internet of Things	B.Intelligence of Technology	C.Input of Text	D.Internet of Training
9	Which of the following is not a common applica...	A.Sentiment analysis	B.Machine translation	C.Image recognition	D.Chatbots

In [8]:
```
# save thành csv (test)
df.to_csv('lab1a.csv', index=True)
```

```
# save thành json
df.to_json('lab1a.json', orient='records')
```