1

Question: What is the primary objective of the project described in the synopsis?

A) To research the effectiveness of different CNN architectures.

B) To develop a system for classifying and recommending solutions for plant diseases.

C) To create a comprehensive database of plant diseases and supplements.

D) To compare different deep learning frameworks for image classification.

Correct Answer: B

2

Question: What web framework is used to develop the user interface for this project?

A) React

B) Angular

C) Vue.js

D) Flask

Correct Answer: D

3

Question: Which deep learning library is employed for building and training the CNN model?

A) TensorFlow

B) Keras

C) PyTorch

D) Theano

Correct Answer: C

4

Question: What type of neural network is at the core of the image classification model?

A) Artificial Neural Network (ANN)

B) Recurrent Neural Network (RNN)

C) Convolutional Neural Network (CNN)

D) Generative Adversarial Network (GAN)

Correct Answer: C

5

Question: Which dataset is used to train the image classification model?

A) ImageNet

B) CIFAR-10

C) Plant Village Dataset

D) MNIST

Correct Answer: C

6

Question: How many images of infected leaves does the Plant Village Dataset contain, according to the synopsis?

A) 6,148

B) 61,486

C) 614,860

D) It doesn't specify the exact number.

Correct Answer: B

7

Question: What file format is used to store the information about plant diseases?

A) JSON

B) XML

C) CSV

D) SQL

Correct Answer: C

8

Question: Which file would you need to access information about the visual appearance of a supplement?

A) app.py

B) supplement_info.csv

C) disease_info.csv

D) CNN.py

Correct Answer: B

9

Question: What is the role of the "CNN.py" file in the project structure?

A) It handles user authentication and security.

B) It contains the code for the web application's frontend.

C) It defines the CNN architecture and training process.

D) It manages the database connections.

Correct Answer: C

10

Question: After a user uploads an image, what is the first step the system takes?

A) Generating recommendations

B) Classifying the image based on the trained CNN model

C) Displaying the results to the user

D) Connecting to external agricultural databases

Correct Answer: B

11

Question: What is the primary output generated by the system for the user?

A) A detailed report on the chemical composition of the plant disease.

B) The classification of the disease and recommendations for treatment.

C) A 3D model of the infected leaf.

D) The market price of the affected plant species.

Correct Answer: B

12

Question: According to the conclusion, who are the intended users of this system?

A) Software engineers

B) Graphic designers

C) Farmers and agricultural experts

D) Data scientists

Correct Answer: C

13

Question: What programming language forms the foundation of the backend development for this project?

A) Java

B) C++

C) Python

D) JavaScript

Correct Answer: C

14

Question: What is the purpose of using Pandas in this project?

A) For creating interactive data visualizations

B) For data manipulation and analysis

C) For building the web application's user interface

D) For training the CNN model

Correct Answer: B

15

Question: Where are the images and stylesheets used for the web application stored?

A) In the 'templates' folder

B) In external cloud storage

C) In the 'static' folder

D) Within the database

Correct Answer: C

16

Question: What type of information does the 'disease_info.csv' file likely contain?

A) Images of healthy and diseased plants

B) Details about different plant diseases and their prevention

C) Code for training the CNN model

D) User login credentials

Correct Answer: B

17

Question: Which file acts as the entry point for the Flask web application?

A) CNN.py

B) app.py

C) disease_info.csv

D) index.html

Correct Answer: B

18

Question: What is the purpose of the "Recommendation System" component?

A) To display the classified disease category to the user.

B) To suggest suitable supplements and preventive measures.

C) To store and manage user data securely.

D) To optimize the performance of the CNN model.

Correct Answer: B

19

Question: The project demonstrates the effectiveness of using deep learning for what specific agricultural task?

A) Predicting weather patterns

B) Automating irrigation systems

C) Plant disease diagnosis and treatment suggestion

D) Monitoring soil nutrient levels

Correct Answer: C

20

Question: What is the primary function of the "Image Classification Model" component?

A) To collect user feedback on the system's accuracy.

B) To categorize the uploaded image into a specific disease category.

C) To generate visually appealing charts and graphs.

D) To manage the web application's security protocols.

Correct Answer: B

21

Question: What is the role of the 'supplement_info.csv' file?

A) It contains details about different CNN architectures.

B) It stores information about various plant supplements.

C) It logs user activity within the web application.

D) It manages the communication between the frontend and backend.

Correct Answer: B

22

Question: What is the primary advantage of using a web-based approach for this plant disease classification system?

A) It allows for offline use without an internet connection.

B) It restricts access to a limited number of users.

C) It enables accessibility from various devices with internet connectivity.

D) It eliminates the need for regular software updates.

Correct Answer: C

23

Question: Which of the following is NOT a component of the system's tech stack?

A) JavaScript

B) PHP

C) HTML

D) CSS

Correct Answer: B

24

Question: What is the main benefit of using a CNN for image classification in this project?

A) CNNs excel at processing sequential data, making them ideal for analyzing time-series data.

B) CNNs are specifically designed for handling image data and automatically learning features.

C) CNNs are highly interpretable, allowing developers to understand the reasoning behind predictions.

D) CNNs require minimal training data, making them suitable for projects with limited datasets.

Correct Answer: B

25

Question: What is the role of the "Result Display" component in the system workflow?

A) It processes user payments for premium features.

B) It collects user data for research purposes.

C) It presents the classification result and recommendations to the user.

D) It manages the system's database connections.

Correct Answer: C

26

Question: The project aims to assist in the development of applications that are:

A) Desktop-based only

B) Primarily focused on entertainment

C) Web-based or mobile

D) Limited to research purposes only

Correct Answer: C

27

Question: Which technology is used to build the recommendation system?

A) Collaborative filtering

B) Content-based filtering

C) The text doesn't specify the exact recommendation algorithm.

D) Reinforcement learning

Correct Answer: C

28

Question: What type of data is primarily used to train and evaluate the system?

A) Text data from scientific journals

B) Images of infected leaves

C) Sensor data from agricultural fields

D) Satellite imagery

Correct Answer: B

29

Question: What is the significance of the "templates" folder in the project structure?

A) It stores the trained CNN model weights.

B) It contains the HTML files defining the web application's layout.

C) It holds the code for the recommendation system.

D) It manages user authentication and security.

Correct Answer: B

30

Question: Which file would a developer likely modify to adjust the design and styling of the web application?

A) app.py

B) CNN.py

C) A file within the 'templates' folder

D) disease_info.csv

Correct Answer: C

31

Question: What is the role of the "Image Upload" step in the system workflow?

A) To analyze the user's internet connection speed

B) To allow the user to input an image of a potentially infected plant leaf

C) To display a list of previously classified images

D) To generate a unique user ID for tracking purposes

Correct Answer: B

32

Question: What is the main contribution of the project described in the synopsis?

A) Developing a novel deep learning architecture for image classification

B) Creating a comprehensive database of all known plant diseases

C) Implementing a user-friendly system for plant disease identification and treatment suggestion

D) Designing a new algorithm for compressing image data

Correct Answer: C

33

Question: What type of information does the system NOT explicitly provide, according to the synopsis?

A) The name and description of the identified plant disease

B) Recommendations for supplements and prevention measures

C) The estimated market value of the potentially affected crops

D) Visual representation of the uploaded image

Correct Answer: C

34

Question: Which of the following best describes the role of Flask in this project?

A) A machine learning library for training CNN models

B) A web framework for building the application's backend and handling web requests

C) A database management system for storing plant disease information

D) A data visualization tool for generating charts and graphs

Correct Answer: B

35

Question: What is the purpose of the documentation provided with the project?

A) To showcase the team's marketing skills

B) To explain the code, project structure, and functionality to other developers

C) To collect user feedback on the system's usability

D) To protect the project's intellectual property rights

Correct Answer: B

36

Question: The system is primarily designed to address challenges in which domain?

A) E-commerce

B) Social media analytics

C) Agriculture

D) Healthcare

Correct Answer: C

37

Question: What file would a developer likely reference to understand the structure of the CNN model?

A) CNN.py

B) app.py

C) disease_info.csv

D) supplement_info.csv

Correct Answer: A

38

Question: Which of the following is NOT a benefit of using deep learning for plant disease classification, as demonstrated in this project?

A) High accuracy in identifying diseases from images

B) Automation of a traditionally time-consuming process

C) Guaranteed prevention of all crop losses

D) Potential for deployment in accessible mobile applications

Correct Answer: C

39

Question: What is the purpose of the "System Workflow" section in the synopsis?

A) To list the team members and their roles

B) To describe the step-by-step process of how the system works

C) To explain the technical details of the CNN architecture

D) To provide installation instructions for the web application

Correct Answer: B

40

Question: What is the primary output of the "Recommendation Generation" step in the system workflow?

A) A list of potential causes for the identified disease

B) Contact information for local agricultural experts

C) Suggestions for appropriate supplements and preventive measures

D) A detailed weather forecast for the next seven days

Correct Answer: C

41

Question: Which of the following features is NOT explicitly mentioned as part of the project?

A) User authentication and login system

B) Image upload functionality

C) Recommendation system based on classification results

D) Display of classification result and recommendations

Correct Answer: A

42

Question: What is the primary advantage of using a CSV file format for storing disease and supplement information?

A) It allows for the storage of complex, nested data structures.

B) It provides robust security features to protect sensitive information.

C) It is a simple and widely supported format for storing tabular data.

D) It enables real-time data synchronization across multiple devices.

Correct Answer: C

43

Question: What is the role of the project synopsis provided?

A) To serve as a legally binding contract between the developers and users

B) To provide a detailed explanation of the code implementation

C) To offer a concise overview of the project's goals, methodology, and technologies

D) To solicit financial investments for further development

Correct Answer: C

44

Question: What programming language is likely used to create the interactive elements of the web application's frontend?

A) Python

B) HTML

C) CSS

D) JavaScript

Correct Answer: D

45

Question: What is the main difference between the "disease_info.csv" and

"supplement_info.csv" files?

A) They store the same information but in different formats.

B) One file contains information about diseases, while the other contains information about supplements.

C) One file is used for training the CNN model, while the other is used for evaluation.

D) One file is publicly accessible, while the other is private.

Correct Answer: B

46

Question: What is the primary goal of using a deep learning approach in this project, as opposed to traditional image processing techniques?

A) To reduce the need for manual feature engineering and allow the model to learn features directly from the data.

B) To create visually appealing user interfaces.

C) To minimize the computational resources required for image classification.

D) To comply with industry standards for agricultural software development.

Correct Answer: A

47

Question: The project is presented by:

A) A single individual

B) A group of researchers affiliated with a university

C) A commercial software company

D) A group of students

Correct Answer: D

48

Question: What is the likely reason for using HTML, CSS, and JavaScript together in this

project?

A) To enable the creation of dynamic and interactive web pages.

B) To simplify the process of training the CNN model.

C) To reduce the need for server-side processing.

D) To improve the security of the web application.

Correct Answer: A

49

Question: What is the significance of the student ID numbers listed in the synopsis?

A) They are used for user authentication within the web application.

B) They represent unique identifiers for the different plant diseases in the database.

C) They likely serve as a way to attribute the work to the individual students involved.

D) They indicate the version number of the software used in the project.

Correct Answer: C

50

Question: What is the overall tone of the project synopsis?

A) Highly technical, focusing on complex algorithms and code implementation details.

B) Informal and conversational, addressing the reader directly.

C) Objective and informative, summarizing the key aspects of the project.

D) Promotional, emphasizing the commercial viability of the system.

Correct Answer: C