

SESSION 1. Introduction & AI Project Cycle

1. The AI Project Cycle provides a framework for:

- A) Random idea generation
- B) Completing AI projects systematically
- C) Replacing human labor
- D) Entertainment

Answer: B

2.The first step of the AI Project Cycle is:

- A) Data acquisition
- B) Problem scoping
- C) Modelling
- D) Evaluation

Answer: B

3.The main goal of problem scoping is to:

- A) Collect data
- B) Train AI models
- C) Define the problem clearly
- D) Create reports

Answer: C

4. During data acquisition, data is collected from:

- A) Random websites
- B) Reliable and authentic sources
- C) Games
- D) Audio files only

Answer: B

5. Data visualization helps in:

- A) Hiding data
- B) Understanding patterns easily
- C) Increasing errors
- D) Reducing accuracy

Answer: B

6.Modelling involves:

- A) Designing algorithms to achieve project goals
- B) Collecting data
- C) Evaluating results
- D) Storing files

Answer: A

7. Evaluation in AI project cycle is done to:

- A) Delete data
- B) Test model accuracy and improve it
- C) End the project
- D) Reduce training time

Answer: B

8. Deployment ensures:

- A) The AI model runs successfully in real-world settings
- B) Model is deleted
- C) Theoretical testing only
- D) Code remains hidden

Answer: A

9. The AI Project Cycle is described as:

- A) A straight line process
- B) A cyclical process
- C) A random loop
- D) A one-time task

Answer: B

10. The stage that determines the model type to use is:

- A) Problem scoping
- B) Modelling
- C) Data acquisition
- D) Evaluation

Answer: B

SESSION-2 AI Domains

11. The three domains of AI are:

- A) Robotics, IoT, Blockchain
- B) Statistical Data, Computer Vision, NLP
- C) Machine Learning, Deep Learning, Big Data
- D) Neural Networks, AR, VR

Answer: B

12. Statistical Data domain involves:

- A) Sound analysis
- B) Collecting and analyzing numerical data
- C) Speech synthesis
- D) Robotics

Answer: B

13. An example of statistical data domain is:

- A) Face detection
- B) Price comparison websites
- C) Language translation
- D) Gaming

Answer: B

14. Computer Vision (CV) helps machines to:

- A) Understand spoken language
- B) Analyze and interpret visual content
- C) Write essays
- D) Predict sounds

Answer: B

15. An example of computer vision use is:

- A) Email filtering
- B) Crop monitoring using drones
- C) Chatbots
- D) Speech synthesis

Answer: B

16. The main input for computer vision is:

- A) Text
- B) Visual data (images/videos)
- C) Audio
- D) Numbers

Answer: B

17. Natural Language Processing (NLP) focuses on:

- A) Human-computer interaction using natural language
- B) Machine vision
- C) Numerical data
- D) Robotics

Answer: A

18. An example of NLP is:

- A) Face recognition
- B) Email spam filters
- C) Image classification
- D) Temperature control

Answer: B

19 . Machine translation (e.g., Google Translate) is a part of:

- A) Computer Vision
- B) NLP
- C) Robotics
- D) Statistical Data

Answer: B

20.The purpose of NLP is to:

- A) Understand and make sense of human languages
- B) Generate random text
- C) Detect colors in images
- D) Store data

Answer: A

SESSION 3. Ethical Frameworks

21. A framework helps by providing:

- A) Random results
- B) Step-by-step guidance for solving problems
- C) Shortcuts to success
- D) Aesthetic designs

Answer: B

22. Ethics help in:

- A) Separating right from wrong

- B) Automating work
- C) Saving money
- D) Training models

Answer: A

23. Ethical frameworks ensure:

- A) Morally acceptable AI decisions
- B) Fast data processing
- C) Cheap solutions
- D) Unlimited access to data

Answer: A

24. Ethical frameworks are categorized into:

- A) Sector-based and value-based
- B) Modern and ancient
- C) Linear and nonlinear
- D) Simple and complex

Answer: A

25. Sector-based frameworks apply to:

- A) Specific industries or domains
- B) General moral behavior
- C) Language processing
- D) Computer hardware

Answer: A

26. Bioethics belongs to which framework type?

- A) Value-based
- B) Sector-based
- C) Religious-based
- D) Humanistic

Answer: B

27. Value-based frameworks are guided by:

- A) Money and resources
- B) Ethical principles and values
- C) Programming languages
- D) Government policies

Answer: B

28. Rights-based framework emphasizes:

- A) Human rights and dignity
- B) Financial gain
- C) System speed
- D) Market competition

Answer: A

29. Utility-based frameworks aim to:

- A) Maximize overall good and minimize harm
- B) Focus on rules
- C) Avoid human interaction
- D) Promote bias

Answer: A

30. Virtue-based frameworks focus on:

- A) Character and intentions of individuals
- B) Profit and loss
- C) Data accuracy
- D) Physical design

Answer: A

SESSION 4. Bioethics and Principles

31. Bioethics applies mainly to:

- A) Healthcare and life sciences
- B) Robotics and IoT
- C) Computer networks
- D) Agriculture only

Answer: A

32. The principle “Do not harm” is also known as:

- A) Non-maleficence
- B) Beneficence
- C) Justice
- D) Integrity

Answer: A

33. “Beneficence” means:

- A) Avoiding harm
- B) Promoting well-being
- C) Being neutral
- D) Hiding data

Answer: B

34. “Justice” in bioethics focuses on:

- A) Equal distribution of benefits and burdens
- B) Avoiding laws
- C) Maximizing profit
- D) Ignoring social factors

Answer: A

35. “Respect for autonomy” ensures:

- A) Transparency and awareness in decision-making
- B) Blind automation
- C) Avoiding explanation
- D) Data secrecy

Answer: A

36. In the healthcare case study, bias occurred because:

- A) The model used expense data instead of health data
- B) The dataset was too large
- C) The AI was open-source
- D) Doctors trained the AI manually

Answer: A

37. The problem in the case study affected:

- A) Western region patients
- B) All patients equally
- C) Northern region patients
- D) Urban hospitals only

Answer: A

38. Ethical AI solutions require:

- A) Bias-free datasets
- B) Hidden algorithms
- C) Restricted access
- D) Unverified data

Answer: A

39. Applying bioethical principles can:

- A) Prevent unintended negative consequences
- B) Slow down development
- C) Reduce transparency
- D) Increase data bias

Answer: A

40. The goal of “Maximum benefit” principle is:

- A) To achieve positive outcomes for all stakeholders
- B) To reduce project duration
- C) To avoid competition
- D) To minimize training data

Answer: A

SESSION 5. Case Studies & Applications

41. A biased hiring algorithm shows the need for:

- A) Ethical frameworks in AI
- B) Larger data sets only
- C) Faster computers
- D) Random testing

Answer: A

42. In the AI healthcare example, ethical evaluation should ensure:

- A) Equal access and fairness
- B) Profit maximization
- C) Simplified code
- D) Smaller data size

Answer: A

43. Justice as an ethical value prevents:

- A) Discrimination
- B) Learning
- C) Model testing
- D) Visual errors

Answer: A

44. Value-based frameworks help in:

- A) Guiding ethical decision-making
- B) Financial analysis
- C) Model debugging
- D) Server hosting

Answer: A

45. “Non-maleficence” stresses:

- A) Avoiding harm
- B) Ignoring errors
- C) Maximizing harm
- D) Economic efficiency

Answer: A

46. Which of the following is a real-life NLP application?

- A) Google Translate
- B) CCTV camera
- C) Thermostat
- D) Digital Clock

Answer: A

47. Which domain of AI helps in pest detection in agriculture?

- A) Computer Vision
- B) NLP
- C) Statistical Data
- D) Bioethics

Answer: A

48. Ethical frameworks prevent:

- A) Unintended harm and bias in AI solutions
- B) Model training
- C) Data visualization
- D) Automation

Answer: A

49. The purpose of frameworks in general is to:

- A) Organize problem-solving steps
- B) Replace human judgment
- C) Hide process flow
- D) Generate profits

Answer: A

50. The AI Project Cycle emphasizes:

- A) Continuous improvement through iteration
- B) One-time model building
- C) Ignoring evaluation
- D) Avoiding deployment

Answer: A