INFO 102 Spring 2026 Quiz 2

Name: KEY **NetID**: KEY

Each question has a box where you should clearly write your answer. If options are listed with letters, put the letter you chose in the box; otherwise put the word or number in the box.

Question 1: To know if an AI algorithm is **supervised** requires knowing

A. If there's a feedback mechanism in its user interface
B. What its training data looks like
C. What problems it can solve
D. Whether it learned with human help

B (does it have input/output pairs)

Question 2: What is the word used to describe AI systems that continue to learn after they are released?

online

Question 3: Which one more directly impacts LLM electricity consumption:

A. Length of text I send to it
B. Length of text it sends back

B

Question 4: What is the name of the problem where an AI can repeat its training data well, not respond well to inputs not present in its training?

overfitting

Information for 5–8: For each described AI system, identify what group of AI it is:

A. Classification
B. Clustering
C. Generative
D. Regression

Question 5: Given income and zip code, predict the value of owned vehicle(s).

D regression (partial for C)
(apply learned function to new inputs)

Question 6: Given pictures of newly-discovered creatures, estimate how many species there are and which pictures are of each species

B clustering (half for A)
(output categories not in training data)

Question 7: Given satellite photographs of cities, pick out each tree in each photo.

A classification (half for B)
(output categories from training data)

Question 8: Given the past five days' weather reports, predict today's high temperature.

C generative (half for D)
(complete an incomplete pattern)

Question 9: Suppose an LLM response includes references to items from yesterday's news. This most likely means it

A. has been fine-tuned
B. is agentic
C. is reasoning
D. learns as it is running
E. was trained in the last 24 hours

B (or some C) can read webpages (LLMs take months to train offline)

Question 10–13: What are the five stages of the **waterfall model** we discussed in class? There are points for names and order. Getting 4 out of 5 is full credit.

1. Requirements

2. Design

3. Implementation

4. Testing

5. Maintenance

Question 14: In software development, "upstream" refers to

A. An earlier stage in the waterfall model
B. Brittleness
C. Libraries being used
D. Previous versions of the software
E. Requested by management

C

Question 15: Which of the following is an example of **refactoring**?

A. Adding a "preferred name" field to everyone's user profile.
B. Changing which algorithm is used to sort numbers to be more performant.
C. Disabling a buggy feature to keep the program running.
D. Changing a program crash to show an error message instead.

B (the only one that doesn't change the program's behavior)

Question 16: A scrum backlog is a list of stories. In this context, a story is a description of

A. an implementation of the scrum design
B. how part of the software is designed
C. one piece of a larger software system
D. something the software did wrong
E. something the software should be able to do

E (half for D)

Bonus Question (0.1 weight): If LLM agents start doing all software development, are human models like waterfall and scrum still relevant? Why or why not?

Yes, no, and maybe all accepted if reason suggested understanding how LLMs and waterfall or scrum interact.

Most common correct answer: "LLMs learn from humans and thus use the same models to develop software."