

Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
Isulan Camus, Isulan Sultan Kudarat
College of Computer Studies
Bachelor of Science in Information System

IT Elect 311 - Web Systems and Technologies
Final Exam

Name: _____ **Course/Yr/Section** _____ **Score:** _____

Instructions:

- Read each question carefully and encircle the letter of the correct answer.
- You have 2 hours to complete the exam.

1. What does JavaScript primarily do in web development?
 - A. Style web pages
 - B. Add interactivity to web pages
 - C. Manage server-side databases
 - D. Organize HTML structure
2. Which of the following is NOT a data type in JavaScript?
 - A. String
 - B. Number
 - C. Array
 - D. Float
3. What is the correct syntax to declare a variable in JavaScript?
 - A. var x = 5;
 - B. variable x = 5;
 - C. let x = 5;
 - D. Both A and C
4. Which keyword is used to create a function in JavaScript?
 - A. def
 - B. function
 - C. let
 - D. var
5. What is the purpose of the console.log() function in JavaScript?
 - A. To display output in the browser console
 - B. To style web pages
 - C. To manage server-side databases
 - D. To organize HTML structur
6. Why is JavaScript considered a client-side scripting language?
 - A. It runs on the server.
 - B. It runs in the user's browser.
 - C. It is used for server-side programming.
 - D. It is used for database management.
7. What is the purpose of the == operator in JavaScript?
 - A. To assign a value to a variable
 - B. To compare two values for equality
 - C. To check the data type of a variable
 - D. To declare a variable
8. What is the difference between let and var in JavaScript?
 - A. let has block scope, while var has function scope.
 - B. let is used for constants, while var is used for variables.
 - C. let is used for server-side programming, while var is used for client-side programming.
 - D. There is no difference between let and var
9. What is the output of the following code?

```
console.log(5 + "5");
```

 - A. 10
 - B. 55
 - C. "55"
 - D. Error

10. Which code snippet correctly declares a function that returns the sum of two numbers?
- A. `function sum(a, b) { return a + b; }`
 - B. `function sum(a, b) { return a + b }`
 - C. `function sum(a, b) { return a + b; }`
 - D. `function sum(a, b) { return a + b }`
11. What is the output of the following code: `let x = 10; console.log(x += 5);`?
- A. 10
 - B. 15
 - C. "105"
 - D. Error
12. Which method is used to remove the first element from an array in JavaScript?
- A. `push()`
 - B. `pop()`
 - C. `shift()`
 - D. `unshift()`
13. What is the purpose of the `preventDefault()` method in JavaScript?
- A. To prevent the default behavior of an event
 - B. To style web pages
 - C. To manage server-side databases
 - D. To organize HTML structure
14. Which code snippet correctly declares an array of numbers?
- A. `let numbers = [1, 2, 3, 4, 5];`
 - B. `let numbers = (1, 2, 3, 4, 5);`
 - C. `let numbers = {1, 2, 3, 4, 5};`
 - D. `let numbers = "1, 2, 3, 4, 5";`
15. What is the purpose of the `this` keyword in JavaScript?
- A. To refer to the current object
 - B. To declare a variable
 - C. To style web pages
 - D. To manage server-side databases
16. What is the output of the following code?
- ```
let x = "5";
console.log(typeof(x));
```
- A. number
  - B. string
  - C. object
  - D. undefined
17. What is the purpose of the `JSON.parse()` method in JavaScript?
- A. To convert a JSON string into a JavaScript object
  - B. To style web pages
  - C. To manage server-side databases
  - D. To organize HTML structure
18. What is the output of the following code?
- ```
let x = [1, 2, 3];
console.log(x.length);
```
- A. 1
 - B. 2
 - C. 3
 - D. Error
19. What is the purpose of the `setInterval()` function in JavaScript?
- A. To execute a function repeatedly at specified intervals
 - B. To style web pages
 - C. To manage server-side databases
 - D. To organize HTML structur
20. Write a JavaScript function that takes two numbers as input and returns their product.
- A. `function multiply(a, b) { return a * b; }`
 - B. `function multiply(a, b) { return a + b; }`
 - C. `function multiply(a, b) { return a / b; }`
 - D. `function multiply(a, b) { return a - b; }`
21. What is the output of the following code
- ```
let x = "Hello";
let y = "World";
console.log(x + " " + y);
```
- A. Hello World
  - B. HelloWorld
  - C. "Hello World"
  - D. Error
22. Which code snippet correctly declares an object with properties name and age?
- A. `let person = { name: "John", age: 25 };`
  - B. `let person = (name: "John", age: 25);`
  - C. `let person = "name: John, age: 25";`
  - D. `let person = { name: John, age: 25 };`
23. What is the purpose of the `fetch()` function in JavaScript?
- A. To make HTTP requests to a server
  - B. To style web pages
  - C. To manage server-side databases
  - D. To organize HTML structure
24. What is the output of the following code: `let x = [1, 2, 3]; x.push(4); console.log(x);`?
- A. [1, 2, 3, 4]
  - B. [1, 2, 3]
  - C. 4
  - D. Error
25. Which of the following is a best practice in JavaScript coding?
- A. Using global variables for everything
  - B. Using descriptive variable names
  - C. Writing all code in a single function
  - D. Avoiding comments in code
26. What is the purpose of the strict mode in JavaScript?
- A. To enforce stricter parsing and error handling
  - B. To style web pages
  - C. To manage server-side databases
  - D. To organize HTML structure
27. What is the output of the following code?
- ```
let x = "5";
```

```
let y = 5;
console.log(x == y);
```

- A. true
 - B. false
 - C. "5"
 - D. Error
28. Which of the following is NOT a valid way to declare a variable in JavaScript?
- A. let x = 5;
 - B. const y = 10;
 - C. variable z = 15;
 - D. var w = 20;
29. What is the purpose of the Promise object in JavaScript?
- A. To handle asynchronous operations
 - B. To style web pages
 - C. To manage server-side databases
 - D. To organize HTML structure
30. What does UI stand for in web design?
- A. User Interface
 - B. User Information
 - C. User Input
 - D. User Integration
31. What does UX stand for in web design?
- A. User Experience
 - B. User Expertise
 - C. User Expression
 - D. User Extension
32. Which of the following is a key principle of UI design?
- A. Usability
 - B. Complexity
 - C. Server-side programming
 - D. Network configuration
33. What is the purpose of visual hierarchy in UI design?
- A. To guide the user's eye towards the most important information
 - B. To increase complexity
 - C. To manage server-side databases
 - D. To configure network settings
34. What is the role of consistency in UI design?
- A. To create a sense of familiarity
 - B. To increase complexity
 - C. To manage server-side databases
 - D. To configure network settings
35. Why is user research important in UX design?
- A. To understand user needs and behaviors
 - B. To style web pages
 - C. To manage server-side databases
 - D. To organize HTML structure
36. What is the purpose of information architecture in UX design?
- A. To organize and label content on a website
 - B. To style web pages
 - C. To manage server-side databases
 - D. To configure network settings
37. What is the role of accessibility in UI design?
- A. To ensure the website is usable by everyone, including those with disabilities
 - B. To increase complexity
 - C. To manage server-side databases
 - D. To configure network settings
38. What is the importance of responsive design in UI design?
- A. To ensure the website adapts to different screen sizes
 - B. To increase complexity
 - C. To manage server-side databases
 - D. To configure network settings
39. What is the purpose of user flows in UX design?
- A. To map out the steps users take to complete tasks
 - B. To style web pages
 - C. To manage server-side databases
 - D. To organize HTML structure
40. Which of the following is a best practice in UI design?
- A. Using descriptive labels for buttons
 - B. Using complex navigation menus
 - C. Avoiding user feedback
 - D. Using small font sizes
41. What is the purpose of wireframing in UX design?
- A. To create a basic layout of a web page
 - B. To style web pages
 - C. To manage server-side databases
 - D. To configure network settings
42. Which of the following is NOT a principle of good UX design?
- A. Usability
 - B. Complexity
 - C. Accessibility
 - D. Consistency
43. What is the role of typography in UI design?
- A. To enhance readability and visual appeal
 - B. To increase complexity
 - C. To manage server-side databases
 - D. To configure network settings
44. What is the purpose of color theory in UI design?

- A. To create a harmonious and visually appealing design
B. To increase complexity
45. What is the importance of user personas in UX design?
A. To create fictional representations of target users
B. To style web pages
46. What is the purpose of A/B testing in UX design?
A. To compare two versions of a design to see which performs better
B. To style web pages
47. What is the role of prototyping in UX design?
A. To create an interactive model of a design
B. To style web pages
48. What is the importance of user feedback in UX design?
A. To improve the design based on user input
B. To style web pages
49. What is the purpose of usability testing in UX design?
A. To evaluate the ease of use of a design
B. To style web pages
50. Create a user persona for a fitness app targeted at young adults.
A. Name: Alex, Age: 25, Occupation: Software Developer, Goals: Track workouts and nutrition
B. Name: Maria, Age: 45, Occupation: Teacher, Goals: Manage classroom activities
51. What is the purpose of a design system in UI/UX design?
A. To create a consistent and reusable set of design components
B. To style web pages
52. What is the role of user journeys in UX design?
A. To map out the entire user experience from start to finish
B. To style web pages
53. What is the importance of iterative design in UX design?
A. To continuously improve the design based on feedback
B. To style web pages
54. What is the purpose of user stories in UX design?
A. To describe the goals and needs of users in a specific format
B. To style web pages
55. Which of the following is a best practice in UX design?
A. Conducting user research before designing
B. Ignoring user feedback
56. What is the purpose of heuristic evaluation in UX design?
A. To identify usability issues based on established principles
B. To style web pages
57. What is the role of empathy in UX design?
A. To understand and address the needs and emotions of users
B. To style web pages
58. What is the importance of user-centered design in UX design?
A. To focus on the needs and goals of users
B. To style web pages
59. What is the purpose of competitive analysis in UX design?
- C. To manage server-side databases
D. To configure network settings
- C. To manage server-side databases
D. To configure network settings
- C. To manage server-side databases
D. To organize HTML structure
- C. To manage server-side databases
D. To configure network settings
- C. To manage server-side databases
D. To organize HTML structure
- C. To manage server-side databases
D. To configure network settings
- C. Name: John, Age: 30, Occupation: Doctor, Goals: Monitor patient health
D. Name: Sarah, Age: 20, Occupation: Student, Goals: Organize study schedule
- C. To manage server-side databases
D. To configure network settings
- C. To manage server-side databases
D. To configure network settings
- C. To manage server-side databases
D. To configure network settings
- C. Using complex navigation menus
D. Avoiding usability testing
- C. To manage server-side databases
D. To configure network settings
- C. To manage server-side databases
D. To configure network settings

- A. To evaluate the strengths and weaknesses of competing products
 - B. To style web pages
60. What is a web development framework?
- A. A set of tools and libraries to simplify web development
 - B. A programming language for server-side programming
 - C. A database management system
 - D. A network configuration tool
61. Which of the following is a popular front-end framework?
- A. React
 - B. Django
 - C. Ruby on Rails
 - D. Node.js
62. What is the purpose of a CSS framework?
- A. To provide pre-designed styles and components
 - B. To manage server-side databases
 - C. To configure network settings
 - D. To organize HTML structure
63. Which of the following is a JavaScript library?
- A. jQuery
 - B. Bootstrap
 - C. Angular
 - D. Django
64. What is the purpose of a back-end framework?
- A. To manage server-side logic and databases
 - B. To style web pages
 - C. To configure network settings
 - D. To organize HTML structure
65. Why are web development frameworks important?
- A. They simplify and accelerate the development process
 - B. They are used for server-side programming
 - C. They are used for database management
 - D. They are used for network configuration
66. What is the purpose of React in web development?
- A. To build user interfaces with reusable components
 - B. To manage server-side databases
 - C. To configure network settings
 - D. To organize HTML structure
67. What is the purpose of Bootstrap in web development?
- A. To provide pre-designed styles and responsive components
 - B. To manage server-side databases
 - C. To configure network settings
 - D. To organize HTML structure
68. What is the purpose of Angular in web development?
- A. To build dynamic web applications with two-way data binding
 - B. To manage server-side databases
 - C. To configure network settings
 - D. To organize HTML structure
69. What is the purpose of Vue.js in web development?
- A. To build user interfaces with a focus on simplicity and flexibility
 - B. To manage server-side databases
 - C. To configure network settings
 - D. To organize HTML structure

Prepared By

ALEXIS D. APRESTO, PhD

Faculty

BSIS, Program Chairperson

Approved By:

ELBREN O. ANTIONIO, DIT

CCS, College Dean