

Intro to App Design — Progress Check

Name: _____ Period: _____ Date: _____

Choose the best answer for each question. Several questions show **App Lab** (JavaScript) code. One question asks you to select *two* answers.

1. Which of the following best describes a program's *input*?

- (A) Data sent to a computer for processing, such as a tap, a typed value, or a sensor reading
- (B) The comments a programmer writes to document code
- (C) Data a program sends to a device, such as text on a screen
- (D) The order in which statements run

2. Which is an example of program *output*?

- (A) A user typing their name into a text box
- (B) A mouse click on a button
- (C) A message displayed on the screen
- (D) A key press on the keyboard

3. **App Lab.** Consider the code below.

```
onEvent("clickMe", "click", function() {  
  setText("msg", "Hello!");  
});
```

When does the label "msg" get set to "Hello!"?

- (A) Immediately when the app starts
- (B) Each time the user clicks the "clickMe" button
- (C) Once for every line in the program
- (D) Never — the code has no effect

4. **App Lab.** A user types Sam into the input box "nameBox" and then clicks "greetBtn".

```
onEvent("greetBtn", "click", function() {  
  setText("output", getText("nameBox"));  
});
```

What is displayed in "output"?

- (A) Sam
- (B) nameBox
- (C) getText("nameBox")
- (D) Nothing

5. App Lab. The code below runs when the app starts.

```
setText("label", "Ready");  
onEvent("startBtn", "click", function() {  
    setText("label", "Go!");  
});
```

Before the user clicks anything, what does "label" show?

- (A) Ready
- (B) Go!
- (C) Nothing (it is blank)
- (D) Ready and Go! at the same time

6. App Lab. What happens when the user clicks "nextBtn"?

```
onEvent("nextBtn", "click", function() {  
    setScreen("screen2");  
});
```

- (A) The app changes to display "screen2"
- (B) The element "screen2" is deleted
- (C) A new button named "screen2" is created
- (D) The text of "nextBtn" changes to "screen2"

7. App Lab. Which line correctly sets up code to run when the button "submit" is clicked?

- (A) onEvent("submit", "click", function() { ... });
- (B) setText("submit", "click");
- (C) onEvent(submit, click);
- (D) click("submit") { ... }

8. App Lab. The user clicks btnA, then clicks btnB.

```
onEvent("btnA", "click", function() {  
    setText("out", "A");  
});  
onEvent("btnB", "click", function() {  
    setText("out", "B");  
});
```

What does "out" show *after* both clicks?

- (A) A
- (B) B
- (C) AB
- (D) Nothing

9. App Lab. This code should display whatever the user typed in "nameBox", but it does not work.

```
onEvent("saveBtn", "click", function() {  
    setText("greeting", setText("nameBox"));  
});
```

What is the best fix?

- (A) Use `getText("nameBox")` to *read* the input instead of `setText`
- (B) Rename the button "saveBtn"
- (C) Remove the semicolon at the end
- (D) Add a second screen to the app

10. App Lab. Clicking the on-screen button does nothing. In Design mode the button's id is "startBtn".

```
onEvent("startButton", "click", function() {  
    setText("status", "Started");  
});
```

What is the problem?

- (A) The id in `onEvent("startButton")` does not match the button's id ("startBtn")
- (B) `setText` is spelled incorrectly
- (C) "click" should be "press"
- (D) The function must be given a name

11. App Lab. When "btn" is clicked, where does the text "clicked" appear?

```
onEvent("btn", "click", function() {  
    console.log("clicked");  
});
```

- (A) In the console (debug area), not on the app screen
- (B) On the app screen where the user can see it
- (C) In a pop-up shown to the user
- (D) Nowhere — `console.log` is not real code

12. App Lab. Which *two* statements about the code below are true?

(Select two answers.)

```
setText("title", "Quiz App");  
onEvent("go", "click", function() {  
    setScreen("q1");  
});
```

- (A) "title" is set to "Quiz App" as soon as the app starts.
- (B) The screen changes to "q1" only when the "go" button is clicked.
- (C) The screen changes to "q1" as soon as the app starts.
- (D) "Quiz App" appears only after the button is clicked.

13. Which list shows commonly used phases of a development process?

- (A) Investigating & reflecting, designing, prototyping, testing
- (B) Compiling, linking, executing, deleting
- (C) Sorting, searching, merging, splitting
- (D) Encrypting, decrypting, sampling, rounding

14. A comment in a program:

- (A) Changes the output the user sees
- (B) Is required for the program to run
- (C) Documents the code for people and does not affect how the program runs
- (D) Speeds up the program at run time

15. Why does collaboration that includes diverse perspectives improve a computing innovation?

- (A) It removes the need for testing
- (B) It helps avoid bias and reflects a wider range of talents and user needs
- (C) It makes the program run faster
- (D) It guarantees the program has no errors