

ICD2O – Unit 2 Test Review

1. What are the 3 modes that make up AppLab?	Design mode, Code mode, Run mode
2. Which AppLab Mode allows you to choose the things you want on the screen?	Design
3. Which AppLab Mode allows you to pick the default text on the screen?	Design
4. Which AppLab Mode allows you add a sound object?	Code
5. Which AppLab Mode allows you to click on the buttons?	Run
6. Which AppLab Mode allows you to hear the sounds?	Run
7. Which AppLab Mode allows you to write the questions for users to answer.	Code
8. Which AppLab Mode allows you to see if all the pieces are working?	Run
9. Which AppLab Mode allows you test the buttons to see if they work?	Run
10. Which AppLab Mode allows you type in a prompt?	Run
11. Which AppLab Mode allows you to move a widget's position on the screen?	Design
12. What is the name for a piece of a user interface, like a button or an image?	Widget
13. How many onEvent blocks do you need?	One for each button
14. What needs a meaningful id? (2 things)	Buttons Widgets that change
15. Why do things need a meaningful id?	To make our code easier to understand
16. What is a named piece of RAM?	Variable
17. What is a keyword? 18. (3 points)	A word that is already used for something in the coding. Eg, Var or onEvent Don't name your variables keywords
19. What are the 5 rules for variables?	Can't START with a number No spaces No special characters Not a keyword Make it meaningful
20. Identify the two variable types	Number and text
21. Identify the variable type used to hold a noun	Text
22. Identify the variable type used to hold a name	Text
23. Identify the variable type used to hold a phone number	Text

24. Identify the variable type used to hold a price	Number
25. Identify the variable type used to hold a tax rate	Number
26. Where are variables stored?	RAM
27. In madlibs, what makes the fill-in-the-blanks part work?	Variables
28. What does ISP stand for?	Internet Service Provider
29. What does RSA stand for?	Rivest Shamir Adleman
30. What does DNS stand for?	Domain Name Server
31. What does URL stand for?	Uniform Resource Locator
32. What does TOR stand for?	The Onion Router
33. What does BFS stand for?	Breadth-First-Search
34. What does DFS	Depth-First-Search
35. What is a computer or device that connects to the internet? It requests webpages and information on the internet.	Client
36. What are computers that connect pieces of the internet? They direct packets.	Routers
37. What is a company that sells a connection to an internet?	ISP
38. What is an example of an ISP?	Bell, Rogers....
39. What kinds of cables are used on the internet?	Copper-wire Fiber Optic
40. What is the name of a piece of an internet message?	Packet
41. What are 3 things in a packet header?	Destination IP Address Return IP Address Sequence Number
42. What are 2 things in a packet body?	The data (payload) Error checking
43. What do you send to the DNS?	The URL (Website name)
44. What does the DNS send back to you?	The IP address (that matches the URL you sent)
45. What is the difference between the surface web and the deep web?	The Surface Web is listed in the DNS.
46. What are two technologies behind the dark web?	Cryptocurrency (Blockchain) Encryption
47. Modern encryption uses two keys. What are they?	Public key (lock) Private key
48. What is a general term for encrypted text?	Ciphertext
49. What is a general term for decrypted text?	Plaintext
50. What is the number of encrypted layers in a TOR packet?	3

51. What is the technology behind cryptocurrencies to keep them secure?	Blockchain
52. In unbreakable encryption, the key that is like a lock and is distributed to anyone who wants to send you a message?	Public key.
53. The process of translating ciphertext back into plaintext.	Decryption
54. Which part of the Internet tracks websites, making it easier to find IP addresses?	DNS
55. Which part of the Internet isn't illegal, but isn't found in the DNS?	Deep web
56. The process of translating plaintext into ciphertext.	Encryption
57. Which part of the Internet is behind a firewall and can't be easily searched by a search engine?	Deep web
58. Which part of the Internet is by-passed by the TOR browser, making it hard to track illegal websites?	DNS
59. Another word for a Depth First Search	Backtracking Algorithm
60. Another word for the Flood Fill Algorithm	Breadth First Search
61. Why would you use BFS over DFS?	The solution is likely to be close to the root.
62. Why would you use DFS over BFS?	The solution is likely to be close to the leaves.
63. The search that looks at neighbours first.	Breadth First Search
64. The search that looks to the bottom of a tree first.	Depth First Search
65. The AI for a Sudoku game would use this search.	DFS
66. Dijkstra's Algorithm uses an adaption of this search.	BFS
67. Google Map's algorithm to find a route uses an adaption of this search.	BFS.
68. Deep Blue uses this search.	DFS.
69. A graph that has no circuits (loops).	Tree
70. On a tree, the node directly above another.	Parent
71. On a tree, the node directly below another.	Child
72. On a tree, a node that has no children	Leaf
73. Why did we use trees to trace DFS and BFS instead of regular graphs?	The lack of circuits makes it easier to trace the search.
74. Two keys hit together to perform a task.	Keyboard shortcut.
75. The keyboard shortcut for save.	Ctrl-S
76. The keyboard shortcut for undo.	Ctrl-Z

77. Keeping your computer in good running order.	Housekeeping.
78. A second copy of a file in another location.	Backups.
79. Why can't you make a backup in the same place?	That piece of hardware might get broken. Then both files are lost.
80. Why should you name your files well?	So they are easy to find. Dates and numbers can help to order them.
81. Where should files on a computer be organized?	In well named folders.
82. What are two ways to write x^2 in applab?	$x*x$ OR x^2
83. What is the symbol for multiply in applab?	*
84. What is the symbol for divide in applab?	/
85. How do you find variables in applab?	When declared, they have "var" in front In the output, they don't have quotes around them.
86. How do you join variables and text in output in applab?	+
87. Why are variables useful?	1. They allow you to store input until you need it again. 2. They allow you to store the results of calculations until you need it again.
88. Why are variable types useful?	1. They tell how much memory is needed to store the variable. 2. They tell what kinds of operations can be done with a variable.
89. Why is output useful?	It allows you to display the results of a program to a user.
90. What are three kinds of output in applab?	Sound Change image Change text
91. Why is input useful in applab?	It allows the user to input information. This might customize the results or give instructions.
92. What are three kinds of input in applab?	Prompt PromptNum Clicking on a button
93. Why are widgets useful?	1. They are objects that can be clicked, typed in, or changed. 2. They allow input from and output to users. 3. They are user-friendly.
94. What widgets have we used in AppLab?	Buttons Labels Images TextAreas Screens

