



# Core Competence of App Inventor Programming

## MIT App Inventor 2 Examination Paper

### **Exam instructions**

1. This exam is a knowledge exam. Maximum time allowed for this exam is 80 minutes. Please finish all the requirements with the exam time. The full mark means 100 points and you will pass the exam with at least 70-points.
2. There are 50 multiple-choice/multiple-answer questions of knowledge exam, 2 point is given for each correct answered question.
3. Questions will be displayed on the screen directly. When the time allowed for multiple-choice questions is up, the answers you selected will be saved automatically, and you will not be allowed to change the answer further more.
4. While reading the question instructions, please notice that “0” means the number zero and “O” means the corresponding alphabet. The mouse is set as the right-handed user. Mouse button settings are for right-handed.
5. If you have any questions, please raise your hand and ask questions. Do not talk privately.

- Knowledge exam 100% (There are multiple-choice/multiple-answer questions of knowledge exam, 2 point is given for each correct answered question.)  
Follow the instructions of each question to finish the knowledge segment.

01. Which of the following properties can disable components (such as Button, DatePicker)?

- (A) Check the Enabled property
- (B) Uncheck Enabled property
- (C) Check the Visible property
- (D) Uncheck the Visible property

02. Which of the following components can perform data transmission and reception on the network? (more than one answer)

- (A) WebViewer component
- (B) Web component
- (C) TinyWebDB component
- (D) Image component

03. Which of the following components can be used to scan a barcode or a QR-code?

- (A) Camera component
- (B) BarcodeScanner component
- (C) NxtColorSensor component
- (D) OrientationSensor component

04. Which of the following components can be used if you want to keep the data after the program is closed?

- (A) ListPicker component
- (B) TextBox component
- (C) Texting component
- (D) TinyDB component

05. Which of the following methods can't create the .apk installation file? (more than one answer)
- (A) Build menu / App (provide QR code for .apk)
  - (B) Build menu / App (save .apk to my computer)
  - (C) Connect menu / Emulator
  - (D) Projects menu / Export selected project (.aia) to my computer
06. Which of the following options can import the .aia source into my App Inventor development environment? (more than one answer)
- (A) Build menu / App (provide QR code for .apk)
  - (B) Projects menu / Import projects (.aia) from my computer
  - (C) Projects menu / Export selected project (.aia) to my computer
  - (D) Projects menu / Import projects (.aia) from a repository...
07. Which of the following components can be used to access the specified file path on an Android device?
- (A) TinyDB component
  - (B) File component
  - (C) TinyWebDB component
  - (D) WebViewer component
08. According to the blocks below, how many items are available after pressing the ListPicker1?
- (A) 0
  - (B) 1
  - (C) 5
  - (D) 3
09. According to the blocks below, when Button1 is clicked, what is the result on Label1?
- (A) 10
  - (B) 11
  - (C) 12
  - (D) 13

10. According to the blocks below, when Button1 is clicked, what is the result on Label1?
- (A) hello
  - (B) Hello
  - (C) HELLO
  - (D) Ahello
11. According to the blocks below, when Button1 is clicked, what is the result on Label1?
- (A) Display the webpage video format of the website  
`http://www.appinventor.tw/`
  - (B) Display the webpage image format of the website  
`http://www.appinventor.tw/`
  - (C) Display the webpage source code of the website  
`http://www.appinventor.tw/`
  - (D) Display the webpage respond code of the website  
`http://www.appinventor.tw/`
12. According to the blocks below, when Button1 is clicked, what is the result on Label1?
- (A) 3
  - (B) 10
  - (C) 11
  - (D) 13
13. According to the blocks below, what is the time interval for the text of Label1 to change?
- (A) 2ms
  - (B) 1.8s
  - (C) 2s
  - (D) The text of Label1 will never change
14. Which of the following math blocks can round a float number to an integer?
- (A) random fraction
  - (B) round
  - (C) sqrt
  - (D) abs

15. As the image below, which of the following parameter value will change when the phone is rotating around the x-axis?
- (A) Pitch
  - (B) Roll
  - (C) Azimuth
  - (D) Magnitude
16. Which of the following is the unit of measurement used by the Proximity Sensor?
- (A) Meter
  - (B) Foot
  - (C) Inch
  - (D) Centimeter
17. Which of the following description is correct about the Texting component?  
(more than one answer)
- (A) It is a visible component
  - (B) It belongs to the Social category
  - (C) There is an interface for entering text
  - (D) It has a SendMessage function
18. Which of the following description are correct about the NearField component? (more than one answer)
- (A) It is an invisible component
  - (B) Currently App Inventor only supports the reading and writing of text tags
  - (C) This feature is available on all Android devices
  - (D) It can be set to read mode or write mode
19. How does App Inventor control the LEGO robot?
- (A) USB cable
  - (B) Wifi
  - (C) Bluetooth
  - (D) NFC

20. If you want to make an app to determine where you are facing, which of the following attribute of OrientationSensor component is used to determine the orientation?

(A) Azimuth

(B) Pitch

(C) Roll

(D) Angle