

Solutions to Quizzes

Let's see how you have done for these quizzes 😊

Quiz 1

1. The following statement will print the text **Hello World** in the **Console** window. **TRUE**

```
print("Hello World");
```

2. The value of the variable **c** in the following statement will be **3**. **FALSE**

```
var a:int;  
var b:int;  
a = 1;  
b =1;  
c = a + b;
```

3. The value of the variable **fullName**, in the following code snippet, will be **JohnPaul**. **TRUE**

```
Var fName : String= "John";  
Var lName : String= "Paul";  
Var fullName: String = fName + lName;
```

4. The following code snippet will print **I will not go sailing**. **TRUE**

```
var windIsStrong:bool;  
windIsStrong = true;  
If (windIsStrong) print ("I will not go sailing");
```

5. The following code snippet will print **I will not go sailing**. **FALSE**

```
var weatherIsSunny:bool;  
var windIsStrong:bool;  
var iWillGoSailing:bool  
weatherIsSunny = true;  
windIsStrong = false;  
If (weatherIsSunny && !windIsStrong ) print ("I will go sailing");  
If (!weatherIsSunny || windIsStrong ) print ("I will not go sailing");
```

6. Spot three coding mistakes in the following snippet.

```
var test : int //missing semi-colon  
var test2: int;  
test3:int;  
test 3 = test1 + test2;//this should read var test:int =
```

7. Consider the function described in the next code snippet, and select the correct way to call it (i.e., A, B, or C):

- a) **displayMessage();**
- b) **displayAMessage()**
- c) **displayAMessage(); CORRECT (the previous one is missing a semi-colon)**

```
function displayAMessage()  
{  
}
```

8. The value of the variable **counter** in the following code snippet will be **3** after the code has been executed. **FALSE (value is 1)**

```
var counter:int;  
counter = 0;  
counter = counter + 1;
```

9. The following code will print the message **Hello** every second. **FALSE (it will be displayed every frame)**

```
function Update()  
{  
    print ("Hello");  
}
```

10. A local variable can be used from any part of the script. **FALSE**

Quiz 2

1. To create a script you can use the menu: **Game Object | Script**. FALSE (Create | JavaScript)
2. The function **Update** is called every frame. TRUE
3. The function **Start** is called at the start of the game, when the script is enabled. TRUE
4. The error “**Unknown Identifier**” most probably means that
 - a) You have forgotten a semi-colon.
 - b) You have used a variable that was not declared before.
 - c) You have forgotten a curly bracket.
5. The error “**The best method overload for function ... is not compatible**” most probably means that:
 - a) You have forgotten a semi-colon.
 - b) You have used a variable that was not declared before.
 - c) You called a function with the incorrect type for the parameter.
6. The error “**;expected**” most probably means that:
 - a) You have forgotten a semi-colon.
 - b) You have used a variable that was not declared before.
 - c) You called a function with the incorrect type for the parameter.
7. After saving the following script and attaching it to an object, it will display the message “**Hello World**” in the **Console** window. FALSE (it the name should use Uppercase)

```
function update()
{
    print (“Hello World”);
}
```

8. The following code, when attached to an object, will display the value of its **x** position attribute in the **Console** window several times per second. TRUE

```
function Update()
{
    print (“X Position is:”+gameObject.transform.position.x);
}
```

9. The following code, when attached to an object, will display the value of its **y** position attribute in the **Console** window just once. TRUE

```
function Start()
{
    print (“X Position is:”+gameObject.transform.position.y);
}.
```

10. A local variable can be used from any part of the script. FALSE

Quiz 3

1. The function `onControllerColliderHit` is called whenever a collision occurs between the `FirstPersonController` and another object that includes a collider. **FALSE (the function here should have an uppercase O instead)**
2. Given that the object we are colliding with in the next script is named `ground` and that it has been given the tag `pick_me`, the following code will print the message `collided with pick_me` in the `Console` window. **FALSE (the following code displays the name not the tag).**

```
function OnControllerColliderHit (hit: ControllerColliderHit)
{
    if (hit.collider.tag == "pick_me")
    {
        print ("Collided with"+ hit.collider.name);
    }
}
```

3. Write the missing line in this code to be able to destroy the object we have collided with.

```
function OnControllerColliderHit (hit : ControllerColliderHit)
{
    Destroy(hit.collider.gameObject);
}
```

4. By default, all scenes included in the current project are added to the build settings. **FALSE**
5. Find the error in the following code.

```
function OnControllerColliderHit (hit : ControllerColliderHit)
{
    if (hit.collider.gameObject.tag = "pick_me") print ("Collided with a box");
    // = should be replaced by ==
}
```

6. Any scene selected in the `Project` window can be duplicated using the shortcut `CTRL + D`. **TRUE**
7. If the scene `scene4` has been added to the build settings, the following code will load it. **FALSE (this should be LoadLevel)**

```
Application.LoadTheScene("scene4");
```

8. What does this error message most likely mean: `“;missing”`.
 - a) You used a variable that has not been declared yet.
 - b) You may have forgotten a closing bracket.
 - c) **A semi-colon was forgotten at the end of a statement.**
9. What does this error message most likely mean: `“unknown identifier”`.
 - a) **You used a variable that has not been declared yet.**
 - b) You may have forgotten a closing bracket.
 - c) A semi-colon was forgotten at the end of a statement.

10. If the **Console** window shows errors and you can't seem to be able to play your scene, what can you do?
- a) Check the code using the error message provided (i.e., script name, error line and column).
 - b) Correct the error.
 - c) **All the above.**

Quiz 4

1. A new text field can be added to the UI using the menu **GameObject|UI|Text**. TRUE
2. The following code will empty the text component named **userMessageUI**.

```
GameObject.Find("userMessageUI").GetComponent.<UI.Text>.text = "";  
// the docc should be as follows  
GameObject.Find("userMessageUI").GetComponent.<UI.Text>().text = "";
```

3. To be able to deactivate and subsequently reactivate an object named **myObject** from the scene, only the following code is needed: FALSE (the object needs to be declared and linked to at the start of the script also)

```
GameObject.Find("myObject").active = false;  
GameObject.Find("myObject").active = true;
```

4. Find the error in the following code.

```
function OnControllerColliderHit (hit : ControllerColliderHit)  
{  
    if (hit.collider.tag = "pick_me") print ("Collided with a box");  
} // = should be replaced by ==
```

5. Any scene can be duplicated using the shortcut **CTRL + F**. FALSE (this is the shortcut to focus on a particular object)
6. If the scene **scene4** has not been added to the build settings, and the following code is used to load it, an error message will be displayed before the scene is played.

```
Application.LoadTheScene("scene4");  
//should read LoadLevel
```

7. What does this error message most likely mean “;missing”.
 - a) You have forgotten to declare a variable.
 - b) One of the statements in your code is missing a semi-colon.
 - c) The function that you have called does not exist.
8. There is only one way to add a scene to the build settings, and this is using the button **Add Current Scene**. FALSE (you can also drag and drop it to the build settings window)
9. If the function **displayMessage** is defined as follows...

```
function displayMessageToUser (messageToDisplay: String)  
{  
    GameObject.Find("userMessageUI").GetComponent.<UI.Text>().text =  
messageToDisplay;  
    startDeleteMessage = true;  
}
```

... does the following line of code properly call this function? FALSE (the parameter required is of type Boolean and should be a string)

```
displayMessage(true);
```

10. The following statements will display the message “collected box”. TRUE

```
var thisIsTheRightLabel:bool = true;
if (!thisIsTheRightLabel) print ("box not collected yet");
else print ("collected box");
```

Quiz 5

1. The function **DontDestroyOnLoad** is used so that objects are not destroyed when the player collides with them. FALSE
2. The following code will detect if the key *E* is pressed. FALSE (see code correction below)

```
function Update()
{
    if (Input.GetKeyDown (E))
    //should read if (Input.GetKeyDown (KeyCode.E))
    {
        print ("The Key E was pressed");
    }
}
```

3. Find and write the missing code below so that the script makes it possible to empty the text from a **TextUI** game object called **uiText**.

```
function Start()
{
    var t: GameObject;
    t.GetComponent<UIText>().text="";
}
```

4. By default, the option **Play on Awake** is set to true for all **Audio Source** components. TRUE
5. Typing the keyword **scenes** in the search field within the **Project** window will list and display all scenes in the current project. FALSE (t:scene is correct)
6. A camera can only display one layer onscreen. FALSE
7. If the scene **scene5** has been added to the build settings, the following code will load it. FALSE

```
Application.LoadTheScene("scene5");
```

8. What could this error message mean based on the code below "**The best method overload for function ... is not compatible**".
 - a) The parameter passed to the function does not match the type that is required.
 - b) Your computer is not compatible with MonoDevelop.
 - c) There is a system overload due to lack of memory and the code in the function can't be processed.
9. What does this error message mean based on the code below "**Expecting } found...**".
 - a) The code for your function needs to be ended by a closing curly bracket.
 - b) The code for your conditional statement starts with an opening curly bracket and needs to be ended by a closing curly bracket.
 - c) All of the above.
10. What three shortcuts can you use to consecutively save your code, switch to Unity, and then play the scene?

- a) CTRL + S, CTRL + Tab, CTRL + P.
- b) CTRL + S, CTRL + D, CTRL + P.
- c) CTRL + S, CTRL + D, CTRL + R.

Quiz 6

1. The function **onCollisionEnter** is called whenever a collision occurs between two objects with colliders. **TRUE**
2. After adding a target to an NPC, it should automatically look for this target (or is there another necessary step?). **FALSE (we need to bake the scene also)**
3. Write the missing code to be able to detect the tag of the object colliding with the current object (linked to the script).

```
function OnCollisionEnter (hit : Collision)
{
    tagOfOtherObject=hit.collider.gameObject.tag;
}
```

4. By default, an NPC with a given target will avoid all other objects (i.e., walk around them). **FALSE (the scene needs to be baked)**
5. A waypoint is one of the reference points for a particular path. **TRUE**
6. Any scene can be duplicated using the shortcut *CTRL + D*. **TRUE**
7. The following code will reload the current scene. **TRUE**

```
Application.LoadLevel(Application.loadedLevel);
```

8. What does this error message mean: “;**missing**”?
 - a) You forgot to add a semi-colon at the end of a variable definition.
 - b) You forgot to add a semi-colon at the end of a statement.
 - c) **All of the above.**
9. What does this error message mean: “**unknown identifier**”?
 - a) You forgot to declare the variable before using it.
 - b) You may have misspelt the variable that you are trying to use.
 - c) **All of the above.**
10. If the **Console** window shows errors and you can't seem to be able to play your scene, what can you do?
 - a) Take note of the name of the script, the error message, and the column and line where the error was found.
 - b) Fix the errors.
 - c) **All of the above.**