



## Student Log

### Project: Coding in JavaScript with Intel and CoderDojo

Name: .....
Class/tutor group: .....

This Student Log allows you to record your progress as you work through the Coding in JavaScript project. Here you can capture evidence for your teacher of the code you produce when carrying out the same tasks as Steve does in the video tutorials.

#### A reminder – what is this all about?

---

Steve Cutler, from Intel, and friends from CoderDojo, have challenged you to acquire the skills in JavaScript and then use those to add a game function to the Piano App.

To add the game function, you need to understand how to use JavaScript, so Steve has recorded a set of video tutorials to take you through how JavaScript works and how to produce the code in the correct syntax – that is, how to write and structure the language of JavaScript so a browser can read it and use it to make functions of a web page dynamic. You can work through the e-learning module and find out all about JavaScript without writing any code yourself! But hopefully you will be inspired to get your own copy of Notepad++ and copy Steve's actions to generate your own JavaScript along the way.

By the end of this project you will be able to write your own JavaScript code, and add dynamic features to your web page. Importantly, too, you'll be able to work with the JavaScript code in the Piano App and build some features that add a scoring function as users learn new songs.

#### Working through the project

---

The project is designed so that you can work through the e-learning content first, checking your understanding along the way with lots of knowledge check points and a final quiz. You can also stop and start the e-learning content, and the videos within it, to open up your own Notepad++ program and start writing code. You will be able to claim an Open Badge for completion of the e-learning module, and another for completing the Piano App task, by following the link from the project course page to the TechFuture Badge Academy. There is a third badge available, too, for adding dynamic features to your own webpage using JavaScript. Enjoy working on the TechFuture Classroom!

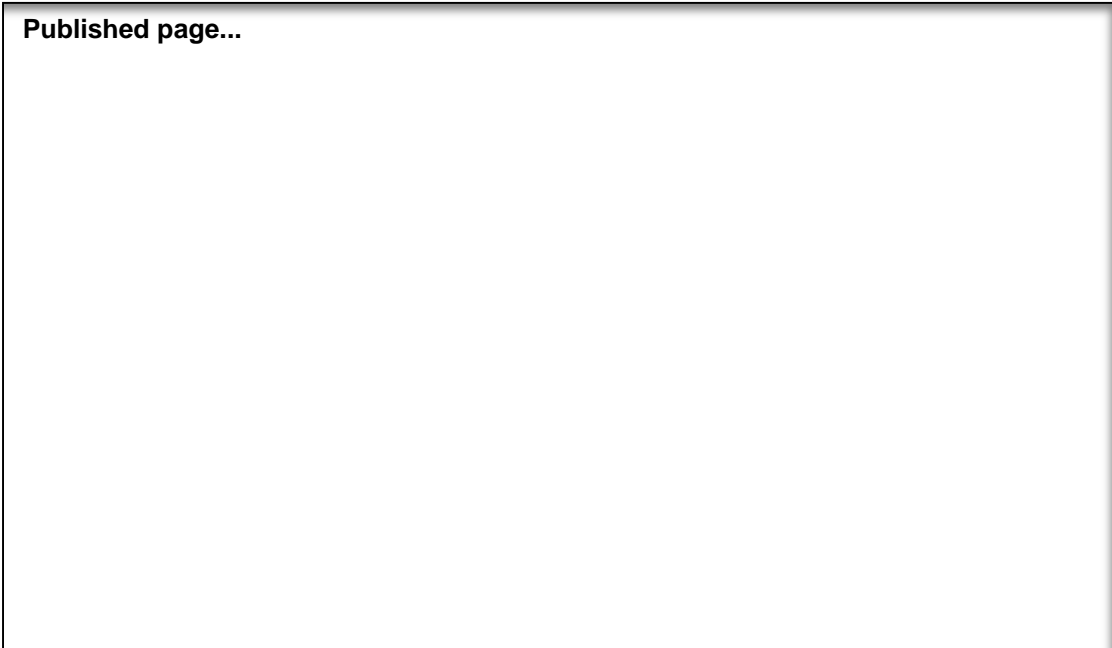
Brought to you by





Take a screenshot of your published page with the message that appears when the button is clicked, and insert it here.

**Published page...**




## **Activity 2: Using JavaScript to capture and user input from the user**

---

Take a screenshot of your code to that allows a user to input their name and insert it in the box below. Use your own message or the same one as Steve.

**HTML code...**





Take a screenshot of your published page with the user name input box and the message that appears when the button is clicked, and insert it here.

**Published page...**

### **Activity 3: Using JavaScript to carry out simple arithmetic**

---

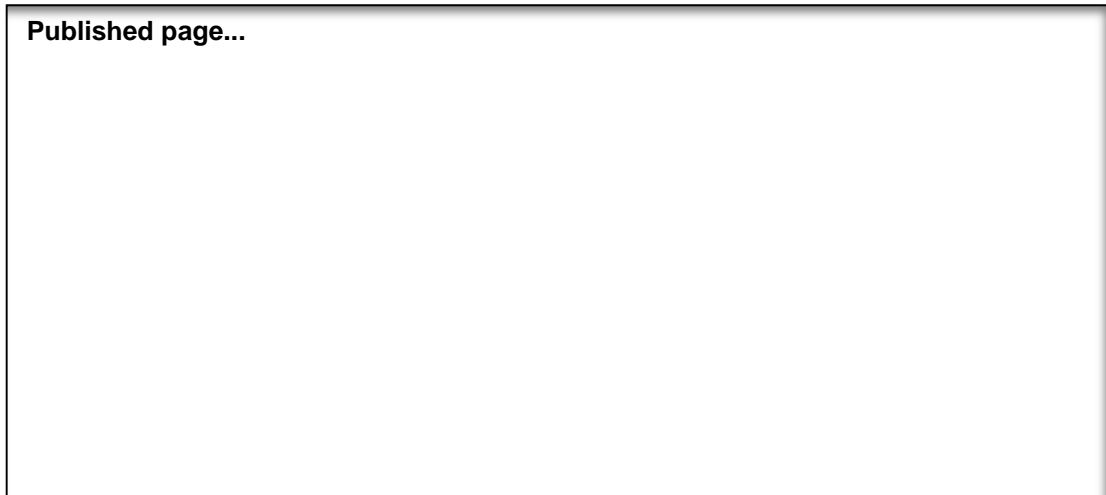
Take a screenshot of your code to that allows a user to add two numbers together and insert it here.

**HTML code...**



Take a screenshot of your published page with the space for two numbers and the correct answer when they are added together and insert it here.

**Published page...**

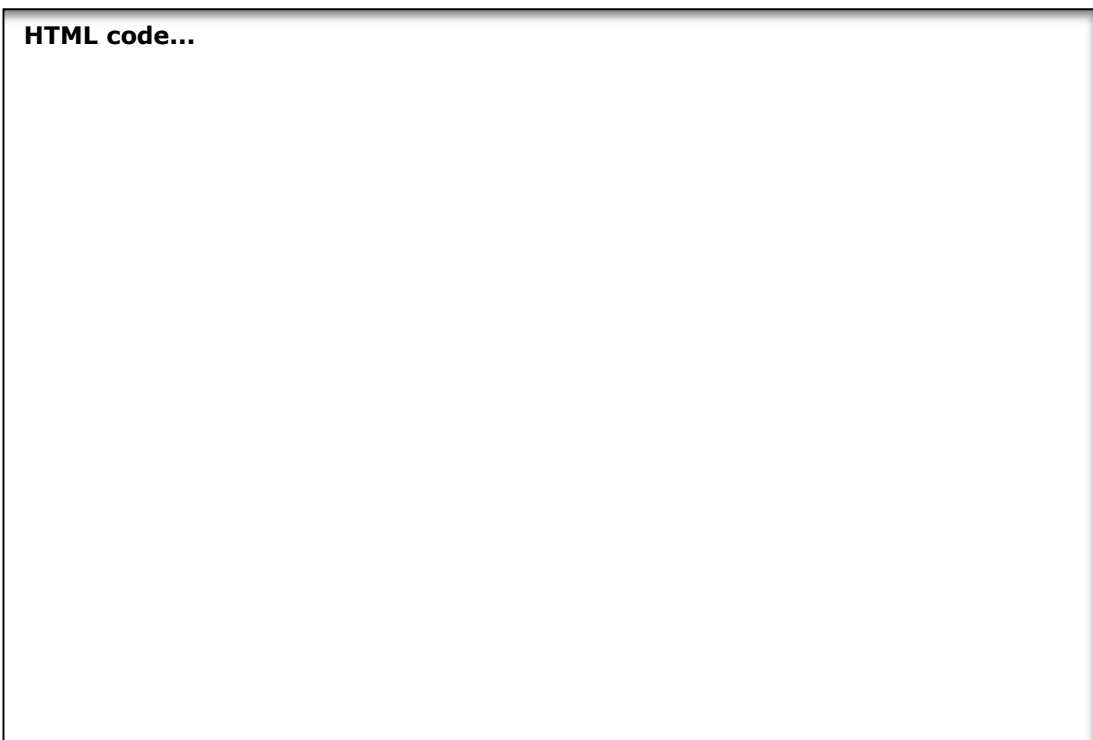


#### Activity 4: Using the 'if' conditional in JavaScript to deliver a message depending on age input

---

Take a screenshot of your code that generates a different message depending on the age input and insert it here.

**HTML code...**





Take a screenshot of your published page when the **age input is 4** and insert it here

**Published page...**

Take a screenshot of your published page when the **age input is 18** and insert it here

**Published page...**



Take a screenshot of your published page when the **age input is 17** and insert it here

**Published page...**

### Activity 5a: Initialising the message

---

Take a screenshot of the code where the message is initialised so that anyone between ages 5 and 16 receive a sensible message, and insert it below.

**HTML code...**



Take a screenshot of the published page displaying the message when age 14 is entered and insert it below.

**Published page...**

### Activity 5b: Adding a further conditional using 'and' (&&)

Take a screenshot of the additional conditional, making use of 'and' and insert it below.

**HTML code...**





Take a screenshot of the published page displaying the message when an age between 13 and 19 is entered and insert it below.

**Published page...**

### Activity 6: Using the 'while' loop

---

Take a screenshot of the 'while' loop used to count from 0 to 10 and insert it below:

**HTML code...**



Take a screenshot of the published page after the count button has been clicked and insert it below:

**Published page...**

### Activity 7: Using the 'for' loop in JavaScript

Take a screenshot of the 'for' loop used to count backwards from 10 to 0 and insert it below:

**HTML code...**



Take a screenshot of the published page, with the backwards count, and insert it here:

**Published page...**

### **Activity 8: Passing parameters to functions to create a calculator**

Take a screenshot of the code to create the calculator and insert it here:

**HTML code...**



Take a screenshot of your published calculator with a calculation displayed and insert it here:

**Published page...**

### Activity 9: Creating JavaScript to change an HTML element and making a balloon burst

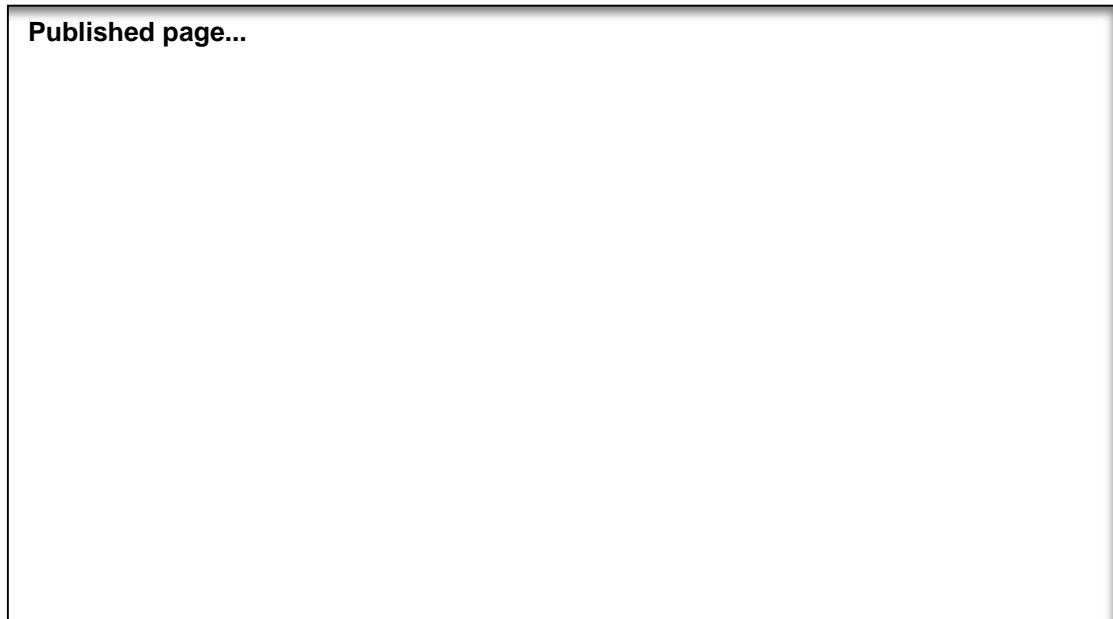
---

Take a screenshot of your code to make the balloon inflate and burst and insert it here:

**HTML code...**



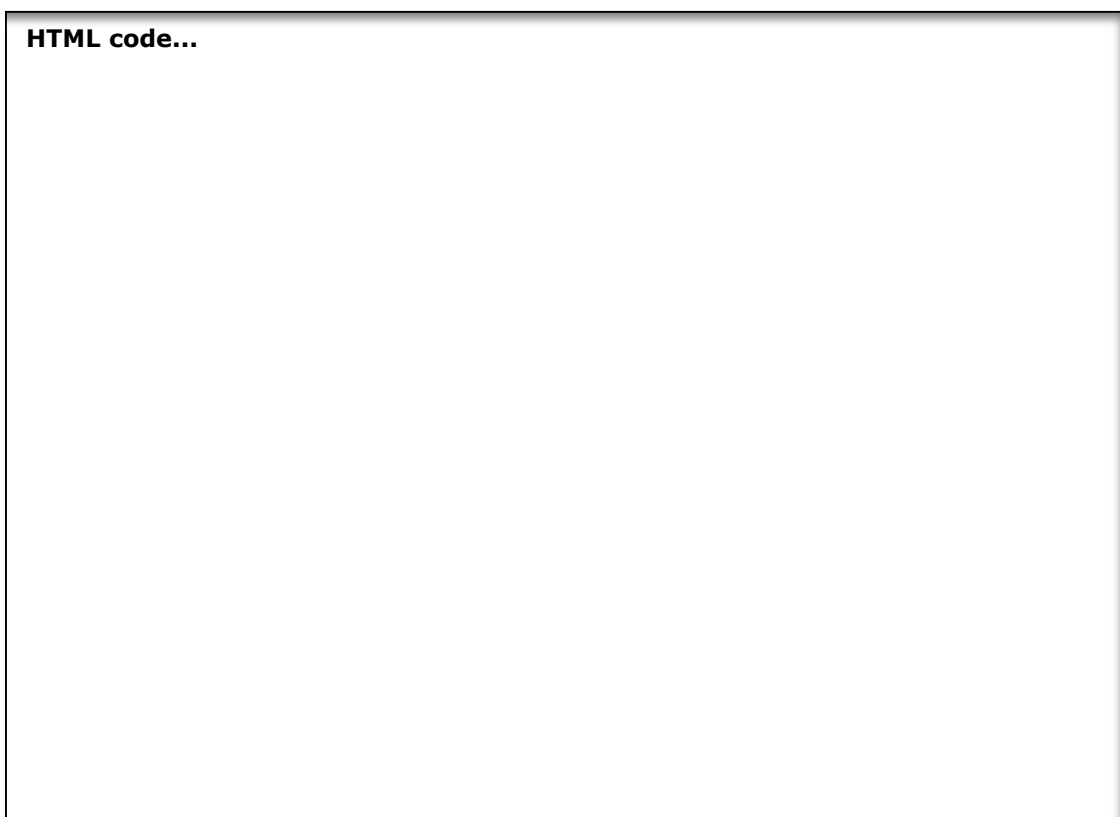
Take a screenshot of the published page, displaying the 'bang' image, and insert it here:



### **Activity 10: JavaScript objects, properties and methods**

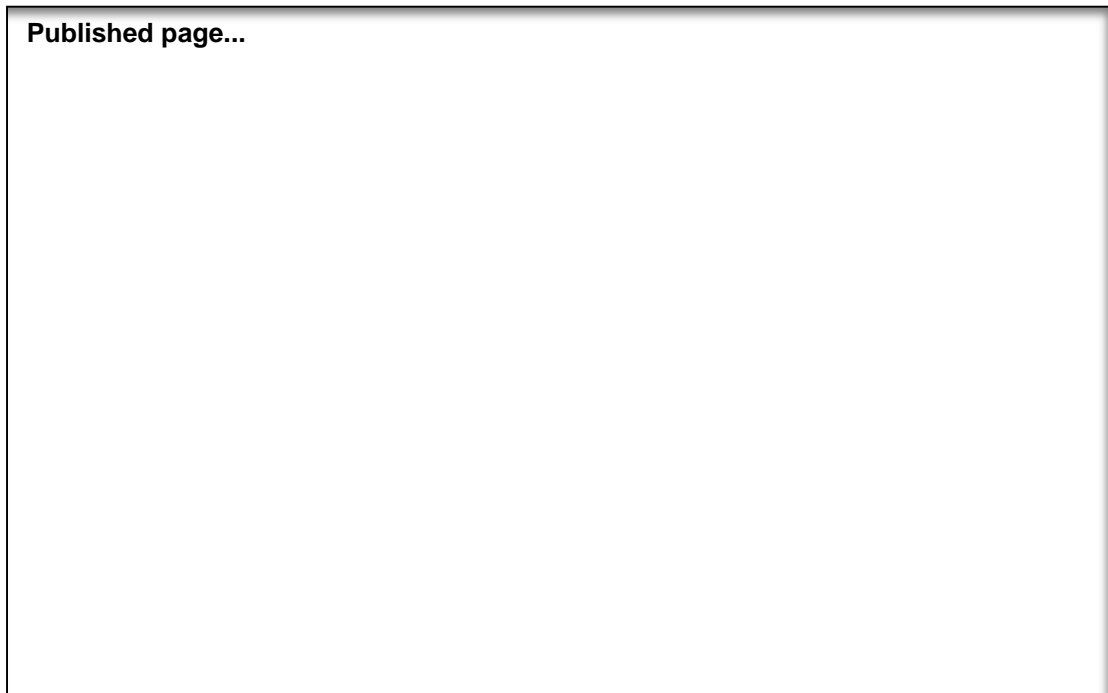
---

Take a screenshot of the code that creates the Convert button for message length and upper case conversion and insert it here:





Take a screenshot of the published page with Convert button and message box showing the output of length and upper case message and insert it here.



### Get recognition for your work in the TechFuture Badge Academy

You can use the evidence of your work on this project to gain three Open Badges in the TechFuture Badge Academy. These badges can be shared with others – potential employers, universities and colleges – to show you have gained skills in your TechFuture Classroom work and elsewhere in school (and outside school, too).

The badges for this project are:

1. **JavaScript Coder** – for working through the e-learning module and completing the quiz
2. **Dynamic Web Developer** – for using JavaScript to add a dynamic function to your web page, for example, a user button, a calculator or the balloon image element change.
3. **Gamification** – for turning the Piano App into a game.

More information about gaining these badges can be found on the Project Course Page.



## Learning outcomes for the Intel and CoderDojo JavaScript project

---

Learning outcomes	Tick
Use Notepad++ to create JavaScript	
Use JavaScript to get user input through buttons and text fields	
Use JavaScript to do simple arithmetic	
Use the 'if' conditional in JavaScript	
Use the 'while' loop in JavaScript	
Use the 'for' loop in JavaScript	
Pass parameters to functions in JavaScript	
Change HTML elements from JavaScript	
Create and use JavaScript objects	
Gamify the Piano App with JavaScript	