Student Log

Project: Coding in CSS with Intel and CoderDojo

Name: ....

Class/tutor group: ....

This Student Log allows you to record your progress as you work through the Coding in CSS 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 CSS and then use those to fix the Piano App, which has been delivered by a software development team with one or two bugs.

To fix the app, you need to understand how to use CSS, so Steve has recorded a set of video tutorials to take you through how CSS works and how to produce the code in the correct syntax – that is, how you write and structure the language of CSS so a browser can read it and use it to style a web page. You can work through the e-learning module and find out all about CSS 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 CSS along the way.

By the end of this project you will be able to write your own CSS code, and style your own web page – or website – by using style sheets. Importantly, too, you'll be able to look at the code for the Piano App and fix the second of two bugs in it. If you continue with the project on JavaScript, you will be able to turn the Piano App into a game.

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 styling your own webpage with CSS. Enjoy working on the TechFuture Classroom!

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TECH PARTNERSHIP

Coding activities to complete alongside Steve's videos

Your teacher may want to assess your new coding skills as you learning how to use CSS. If so, this is where you can record your code and what the published page looks like for each piece of code you produce.

When you've written your code, and checked it works by saving it and publishing it in a browser (Chrome works well), take a screenshot of your code and one of the published page, and insert them into the boxes provided below. Quick reminder – you can take a screenshot by using 'Control P' and then cropping your image in either Photoshop or the Paint application.

Your teacher will be able to assess your code and award you a mark for your work.

Activity 1: The HTML5 code for the class and id attributes

Before you start to write CSS, there is something you need to do in HTML5 to prepare your document to use styling sheets that work on different parts of the web page. These are called classes and id. After watching the first video, create a similar page to Steve's using the class of **header** and the id of **primary**.

Take a screenshot of your code for your teacher to assess and insert it into the box below.

HTML5 code...

Activity 2: Starting to use CSS

You have heard about the style tag and how you can use it to change the appearance of text in your web page. Practice these skills by creating a web page that has **three** paragraphs of text that are **blue**, making use of the style tag. Take a screenshot of your code and insert it below. Remember to save your code for this activity as you will need it for the next task. Don't forget, there is a guide to starting with CSS available from the Resources area if you need to remind yourself of the CSS syntax.

HTML5 code...

Take a screenshot of the published page with the styled text and insert it here.

Published page...

Activity 3: Using CSS with HTML5 attributes

Using the class and id tags with different styles, code your web page to have **two** paragraphs with **yellow text** and **one** with **red text**. Take a screenshot of your code and insert it in the box below.

HTML5 code...

Take a screenshot of the published page with the styled text and insert it here.

Published page...

Activity 3: Using CSS with HTML5 attributes

Activity 4: Changing the font style and text alignment using CSS

Style your page (using code from the previous activity) so that the yellow text paragraphs are in **font Verdana, size 12 pixels, in italics and aligned to the centre**. Take a screenshot of your use of the font style and alignment code and insert it in the box below.

HTML5 code...

Take a screenshot of the published page with the styled text and insert it here.

Published page...

Activity 5: Setting the size and position of an image with CSS

Using one of the copyright free images in the Resources area, or one of your own, insert an image into a new web page. Style it to **size 320 pixels wide and 240 pixels high, positioned at 75 pixels from the left and 75 pixels from the top**. Take a screenshot of your use of the image size and position code and insert it into the box below. Save your code – you'll need it in the next activity.

HTML5 code...

Take a screenshot of the published page with the sized and positioned image and insert it here.

Published page...

Activity 6a: Using the box model with margins, borders and padding

Using the web page created in the previous activity, add a 2 pixel border around your picture using the border-size, border-color, and border-style syntax.

HTML5 code...

Take a screenshot of the published page with the image and its border and insert it here.

Published page...

Activity 6b: Using the box model with margins, borders and padding

Change the code from Activity 6a to style the border using the alternative syntax – the single border command that styles the style, colour and size in one bracket. Take a screenshot of your code and insert it below.

HTML5 code...

Take a screenshot of the published page with the image and its border and insert it here.

Published page...

Activity 6c: Using the box model with margins, borders and padding

Add a margin and padding of 10 pixels to the code from Activity 6b.

Take a screenshot of your use of the margin and padding syntax and insert it in the box below.

HTML5 code...

Take a screenshot of the published page with the image and its border, margin and padding and insert it here.

Published page...

Activity 7: Using the float attribute

Create a new web page and insert an image of your choice (copyright free images are available in the Resources area), and some text (placeholder text is also available from the Resources area). Style it to make the image float to the left, with a 5 pixel margin. Take a screenshot of your code and insert it in the box below.

HTML5 code...

Take a screenshot of the published page with the image and the text alongside it and insert it here.

Published page...

Activity 7: Using the float attribute

Activity 8: Revising the CSS syntax

Complete the table below to show you know the different CSS syntax that is used to style a web page. We have completed the first two to help you.

CSS syntax	What the syntax does
<style> ... </style> (inserted in the <head> section)	Tells the browser the style information for the web page
<style> p{color:red;} </style>	Tells the browser that all paragraph text in the website will be red
<style> .green{color:green;} </style>	
<style> #blue{color:blue;} </style>	
<style> .green{color:green; font-family:verdana;} </style>	
<style> .green{color:green; font-family:verdana; font-size:10px;} </style>	
<style> .green{color:green; font-family:verdana; font-size:10px; font-style:italic; </style>	
<style> .green{color:green; font-family:verdana; font-size:10px; font-style:italic; text-align:center;} </style>	
<style> #pic1{width:320px; Height:240px;} </style>	

CSS syntax	What the syntax does
\<style\> #pic1{width:320px; height:240px; position:absolute; left:50px; top:50px;} \</style\>	
\<style\> #pic1{border-style:solid; border-color:red; border-width:2px;} \</style\>	
\<style\> #pic1{border:2px solid red;} \</style\>	
\<style\> #pic1{border-style:solid; border-color:red; border-width:2px; margin:10px;} \</style\>	
\<style\> #pic1{border-style:solid; border-color:red; border-width:2px; margin:10px; padding:10px;} \</style\>	
\<style\> img{float:left;} \</style\>	

Final activity: Debugging the CSS in the Piano App

There were two bugs in the Piano App. You fixed the first one at the end of the HTML5 project. Now you can fix the second because you're familiar with CSS and can find the error and correct it.

Use the guide to accessing the code from the Resources section, with the code that is also downloadable in a zipped file. If you're working on this at school, your teacher will have downloaded it for you.

Fix the code to make the Piano App look as it should, and take a screen shot of the debugged CSS code. Insert in the box below.

CSS code...

Take a screenshot of the published debugged Piano App and insert it here.

Published page...

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. **CSS Coder** – for working through the e-learning module and completing the quiz
2. **Webpage Styler** – for using CSS to style your own webpage using class and id attributes, the float attribute, and the box model
3. **CSS Debugging** – for fixing the CSS code in the Piano App

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

Learning outcomes for the Intel and CoderDojo CSS project

Learning outcomes	Tick
Use Notepad++ to create CSS for a web page	
Use HTML5 attributes (class and id) with CSS	
Use CSS to style and position text in a web page	
Use CSS to set the size of elements (e.g. images) in a web page	
Use CSS to set the margins, borders and padding (e.g. the box model) of elements in a web page	
Use CSS and HTML5 to mix text and images effectively in a web page	
Work with both HTML5 and CSS to code and style a web page from scratch	
Apply CSS to a whole web page using a separate styling file	
Find errors in CSS code and fix them	