

Support Notes (Issue 1)

September 2015

Certificate in Digital Applications
(DA105) Coding for the Web

IGphones

Introduction

Before tackling the Summative Project Brief (SPB), students should have acquired the appropriate ICT skills, knowledge and understanding as specified in the 'What You Need To Learn' sections of the DA105 specification.

The DA105 SPB 0915 is valid for moderation in **June 2016, December 2016, June 2017** and **December 2017**.

Teachers and students should remember that the emphasis of this specification is 'creative computing'. It is therefore vital that students take the chosen or specified audience and purpose into account when designing and creating products.

In order to encourage an independent approach to the SPB, students will need to be taught how to create and use appropriate types of documentation to support and record the planning, design, production and review of their work.

Time

Unit 5, as a whole, is a 30-Guided Learning Hours (GLH) unit. Centres must allow 10 hours for students to complete their Summative Project.

Section 1: Using the SPB

Access and navigation

The SPB is intended to be accessed onscreen.

Although the links in the navigation bar are roughly in sequence, students should be reminded that one task often depends on one or more other tasks and they should make use of the interactive nature of the brief.

Where more than one page relates to a main task, they appear as a submenu from the main link.

The symbol  at the top of each page allows students to print the page.

Section 2: Saving the evidence

What evidence is required?

Students do not need to submit evidence of everything they do during their work on the project. They are asked to create named subfolders to store work for submission.

The symbol  indicates a product to be stored in the PRODUCTS subfolder. For this project the product is a website consisting of three web pages.

The symbol  indicates supporting evidence to be saved in the EVIDENCE subfolder. This evidence must include the wireframes, annotated CSS, test log and review.

Students must ensure that they present their work as clearly as possible, remembering that assessors and moderators will view all evidence onscreen.

Copyright

Students **MUST** comply with copyright. They should consider whether they have fully met this requirement. If not, it is not sufficient to simply acknowledge the sources. In their review students must demonstrate their understanding of copyright issues and what would need to be done to make the work fit for use in the public domain.

It is generally the case that suitable assets can be obtained from primary or copyright-free sources.

The CiDA/DiDA Moderator's Toolkit

The CiDA/DiDA Moderator's Toolkit specifies the file types that all moderators can view. It is the students' responsibility to ensure that their folder **only** includes files in the listed formats.

The CiDA/DiDA Moderator's Toolkit is published on the Pearson website. It will be updated when necessary.

Section 3: Supervision and feedback

Supervision and authentication of student work

All work, including any manipulation or development of material, must be done under supervision in the classroom. At the end of the lesson all of the student's materials, paper-based and electronic, must be collected in, stored securely and handed back at the beginning of the next session.

The role of the test buddy and end-of-project reviewers

Each student will work with a test buddy(s) to receive feedback on their work. Students must be made aware of what is expected of a test buddy: they may comment on the '*what*' (what they think is good and what they think could be improved), but they must not feedback on the '*how*' (e.g. how to make changes or specific solutions to any problems).

End-of-project reviewers comment, in the same way, on the finished website.

What feedback can students receive, when?

The controlled assessment task for each unit can be divided into three broad stages. The level of feedback and collaboration allowed varies between stages, as outlined below.

Feedback and collaboration at each stage of the project

Stage 1

This stage starts with students being provided with the SPB.

Students must work individually to create their wireframes.

The teacher may provide feedback on the planned approach, such as highlighting strengths, weaknesses and possible problems with the planned product(s) and approach, but must not suggest, or direct students towards, specific solutions.

Students may receive feedback on their planning work from their test buddy (see *The role of the test buddy and end-of-project reviewers*) and use this to modify their wireframes before seeking approval from the teacher.

Stage 2

Students must work individually to design, build and develop their web pages.

The teacher may provide feedback at the beginning of this stage on students' designs, such as highlighting strengths, weaknesses and problems with the planned web pages, but they must not suggest, or direct students towards, specific solutions.

The teacher must not provide feedback on a student's finished web pages, but may suggest general questions for them to consider (which will be useful in the project review), e.g. 'how do you think x looks?', 'how do you think x could be improved?'

Students may receive feedback from their test buddy (see *The role of the test buddy and end-of-project reviewers*) on their work and incorporate this into their finished web pages.

Stage 3

Students must work individually to complete the project review.

Before starting their project review, students must seek feedback from their end-of-project reviewer on the finished website (see *The role of the test buddy and end-of-project reviewers*), which will be incorporated into the project review. No other feedback from any source is allowed and they cannot receive feedback on the project review itself.

Section 4: Tackling the SPB

The scenario

The client for this project is the owner of a local phone shop. Students must use their coding skills to create a three-page website that will promote the sale of phones and accessories.

Students should be reminded that they are being assessed on their ability to use HTML, CSS and JavaScript effectively rather than their ability to create appropriate content for the website.

Folders

The SPB requires the creation of a folder called 'DA105SPB' that contains two subfolders called PRODUCTS and EVIDENCE. It is crucial that students store all the required items. The appropriate subfolder is indicated for each item.

Test log

Students should test their web pages to make sure that they work as intended in their chosen web browser. The results of this testing should be recorded in a test log.

This test log should detail the dates and outcomes of testing. Students should test that:

- the pages function as intended, e.g. pages link together, the image gallery works, the email link opens in appropriate software
- all content appears appropriately on the page(s), e.g. images appear at a suitable size and resolution
- the page layout is as intended.

A test log is not provided but teachers may create a template that students can use.

Test buddy and end-of-project reviewers feedback

Students may keep records of the feedback they receive and their response to it. They should take note of what their test buddy tells them is good about the work and what could be improved.

Feedback received should be constructive and allow students to improve their work in terms of quality and fitness for the purpose and target audience.

Students should seek feedback from an end-of-project reviewer. This feedback should help them in the review of their finished website.

Wireframes

Students must create a wireframe for each web page. They must discuss these with their teacher and gain approval before continuing.

Students should read the whole SPB before creating the wireframes so that they know what each page must include.

Students should decide on an appropriate page size for the website at this stage of the planning process and indicate this on the wireframes. The wireframes may be in any format, e.g. hand drawn and scanned or computer generated, but it must be made clear to students that the purpose of the wireframes is to show the content and layout of each page.

Each wireframe should include annotations to indicate the nature and size of each page element, e.g. header (1024px x 75px). These could be added as handwritten notes or text boxes/callouts on a computer-generated design. In addition, students should make notes on layout and style, e.g. text box – background #636f57, text #000, border 1px solid #000, padding 5px.

This is also the stage in the process when students should be prompted to select the web browser that they intend to use to test their web pages. This information should be added to the wireframes.

Students should be advised at this early stage of the design process if any of their design ideas are not suitable for any reason, including copyright restrictions.

Writing and editing HTML

At the beginning of the coding stage, students must create a logical directory structure. Students should create their own root folder containing separate folders for images, CSS files and JavaScript files. Students should save their pages as .html, making sure that the home page is saved as index.html

If students are using web authoring software, they should, at times, use the code view to write and edit the HTML code directly, e.g. to add information to structural elements such as <title> and <meta> within the <head> element.

Students will need to have sufficient command over the HTML code in their pages to add internal and email links, create a table of information and manipulate the page structure to include page elements and assets such as headers, footers, text and images.

Students should be reminded that the accessories page requires three columns of equal width. It is, however, up to the student to decide the height, style and content of the columns.

When creating each web page, the focus should be on the process of writing and editing the HTML to make each page function as intended.

Although students will need to populate their web pages with relevant text and images, the focus of this unit is the coding element of creating a website. Students should spend their time controlling the layout, position, functionality and appearance of page elements rather than creating assets. Students should be provided with appropriate text and access to an image bank to enable them to focus on writing and editing the code appropriately. The text and image bank should be created by the centre.

Writing and editing CSS

Students will be expected to use CSS rules to style text, images, links, tables and other elements such as boxes. Testing in the named browser will be essential if pages are to function as intended. Students should record these tests in their test log.

Students will use CSS positioning techniques to create the page layouts established in their wireframes, for example students may use CSS to ensure that the columns on the accessories page are an equal width. They will need to record the process of writing and editing CSS by annotating their code.

JavaScript

Students must use JavaScript to include an image gallery on the home page. The image gallery should contain four thumbnail images of phones. The gallery should display full size versions of the thumbnails by rollover or click.

Students are not expected to write the JavaScript, although they will have to edit the code to incorporate a JavaScript image gallery into their web pages. The use of JavaScript libraries such as JQuery is permitted or teachers can provide appropriate JavaScript for students.

The image gallery should be prominent within the page and contain images of sufficient size and interest so as to significantly enhance the user experience. The image gallery should match the style of the page, e.g. background colours.

Page layout

Students should use their coding skills to create pages that clearly resemble their wireframes, although it is envisaged that improvements will occur, as students develop their initial ideas into fully functioning web pages.

Students should use HTML and CSS code to create appropriate page layouts and present information clearly, e.g. through the use of headings, paragraphs, line breaks, line-height, font-style, text-alignment and colour. There should be an appropriate balance between the amount of text and images on each page and links should be obvious.

Scrolling should be minimised, especially horizontal scrolling, by ensuring that all the page content is visible when the page is opened in the named browser at the intended resolution.

Review

Students should aim to produce a detailed review of the website, avoiding accounts of what they did and how they did it.

Students should comment on the strengths of the website and areas for improvement. They must include feedback from their end-of-project reviewer. However, there is no need to document any interim feedback received from their test buddy during the development of their product.

Students should conclude their review by making specific and valid suggestions for improvement. These may be their own ideas or come from the end-of-project reviewer.

