Mark Scheme (Results)

Summer 2022

Pearson Edexcel International Advanced Subsidiary
In Information Technology (WIT12/ 01)
Unit 2

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Theory Mark Scheme

Question number	Answer	Additional guidance	Mark
1 (a)	Award **one** mark for any of: 1 Makes it easier to read (1) 2 Makes it easier to see where elements begin and end (1) 3 Makes it easier to see nested elements (1) 4 Makes it easier to find errors / less likely to make errors (1) 5 Disorganised code may result in code that does not do what was intended (1) 6 Makes it easier to maintain/amend the code (1) 7 Makes it easier to understand what the code is doing (1)		**1**

Question number	Answer	Additional guidance	Mark
1 (c)	Award **one** mark for each of: 1 Table heading used <th></th> <thead></thead>(1) 2 Table heading spans both columns colspan="2" (1) 3 Table border with a minimum width of 1 added border="1" **OR** at least one data item added (1) Example code is: <table border="1"> <th colspan="2">Some of our services</th> <tr> <td>Ironing</td> <td>Laundry</td> </tr> </table>	Accept with or without quotes for border and colspan	**3**

Question number	Answer	Additional guidance	Mark
1 (d)	Award **two** marks for a linked description such as: 1 Specifies that the paragraph with the tabindex of 1 (1) will be selected the first time the user presses the **tab key** and so on (1) 2 Specifies the order that the paragraphs will be selected (1) when the **tab key** is pressed (1) 3 Weekly cleaning service will be selected first (1) when the **tab key** is pressed (1) 4 It indicates that the paragraphs are focusable (1) and gives the order that the focus will take place (1)		2
		Total mark for question	8

Question number	Answer	Additional guidance	Mark
2(a)(i)	Award **one** mark for: • Adjacent sibling (1)		1
2(a)(ii)	Award **two** marks for a description such as: (The code) will change the font size to 40px (1) for the first p element outside of the div tags (1) (The code) will change the font size to 40px (1) for 'Highly recommend. Used them for years' (1)	Do not allow font size on its own. Need 40px or 40 pixels.	2

Question number	Answer	Additional guidance	Mark
2(b)	Award **two** marks for an explanation such as: Page will load faster (1) as web safe fonts are installed locally on the user's device (1) Page may look different (1) if the font used is not installed locally on the user's device (1) (Web safe fonts are used to) make sure that content is visible (1) and standardised across browsers (for all users) (1)		2

Question number	Answer	Additional guidance	Mark
3(a)(i)	Award **one** mark for each correct value: 	Variable	Value
---	---
chargePerUnit	2
discount	0
totalCharges	400			**3**
3(a)(ii)	Award **one** mark any of: 1 To display the value of totalCharges on the same line as the message (1) 2 To concatenate totalCharges to the message (1) 3 To concatenate a string with a number (1)		**1**

Question number	Indicative content	Mark
5	**Should be identifying factors they think are important** • wireframe • mock-up • style guide *Consideration and significance* **Wireframe** • Provided a clear overview of the page making it easy to see where each of the elements would go • Made it clear what the content would be for each element e.g. gave file names for the content that would be used • Good at showing the proportions for each of the elements • Could clearly see the width of the page • Was good as a method of seeing where the style guide requirements would be applied as some elements were named e.g. header, footer etc. • Was very important but not enough on its own to develop the webpage • No time wasted trying to guess where to place each element as could see where they would be. • Was good as a method of testing after the page was built – could check the widths matched the specification etc. **Mock-up** • Gave more detail visually so could see exactly what text would be used and how it should look • Could clearly see the colours used • Was good as a quick way to test the finished web page to see how well it matched the design Was good as it gave a visual idea of what would be suitable padding/margins as they were not specified anywhere else • Could be matched to the style guide to visualise the effects of the specifications given • Was very important but not enough on its own to develop the webpage **Style guide** • Gave clear specifications for each element though did rely on the developer interpreting the wireframe and mock-up as no specific guidelines given in terms of placement e.g. float etc. • No time had to be wasted trying to what fonts etc. to use, which would have wasted time • Meant developer did not have to create a design	9

Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	• Applies understanding with limited coherence, showing limited understanding of the given issue. • Assessment of solution is superficial or unbalanced, and judgements lack support from evidence.
Level 2	4-6	• Applies understanding to make some coherent connections, showing some understanding of the given issue. • Assessment of solution is partially developed, but this may be unbalanced, using evidence to support some judgements.
Level 3	7-9	• Applies understanding coherently, showing a thorough understanding of the given issue. • Assessment of solution is balanced and developed, using evidence to support judgements throughout.
		Total for question 9

Code Mark Scheme

Question number	Answer		Additional guidance	Mark
1 (b)	Award **one** mark for each correction:			
	B1	<h1> added to beginning of heading (1)		
	B2	<dd> added (1)		**2**
	Correct code is:			

```
<h1>Clean and Gleam</h1>

<p><u>How much do you know about cleaning?</u></p>

<dl>
    <dt>Domestic cleaning</dt>
    <dd>An activity that is part of maintaining clean
    regular basis</dd>
```

Question number	Answer		Additional guidance	Mark
2 (c)	Award **one** mark for each of:		May use different pixels but must work when tested in browser	**3**
	C1	background: url("house.png") with or without quotes		
	C2	background-position:		
	C3	-170px 0px; OR 170px 0px;		
	Sample code is:			

```
    /* Add your code to set the url of the
    background: url("house.png");

/* Background position is set for the fir:
    background-position: 0px 0px;
}

#menu a:hover {

    /* Add your code to display the secti
    background-position: -170px 0px;
}
```

Question number	Answer	Additional guidance	Mark
| 2 (d) | Award **one** mark for each of:<br><br>**D1** Adding HTML code for the rectangle or the circle<br>**D2** Positioning the rectangle or the circle using the z-index / HTML rectangle followed by square, followed by circle<br>**D3** Setting the height and width of the circle<br>**D4** Setting the background of the circle to yellow<br>**D5** Setting the border-radius of the circle to 50% OR suitable pixels<br><br>Sample code is:<br><br>```html
<!--Add your HTML code here!-->
<div class="shapes rectangle"></div>
<div class="shapes circle"></div>

.circle {
   /* Add your code to draw and position the circle here */
   height: 300px;
   width: 300px;
   background: yellow;
   border-radius: 50%;
   z-index: 2;
}

.square {
   height: 400px;
   width: 400px;
   background: blue;

   /* Add your code to position the square here */
   z-index: 1;
}
``` | May use different pixel or percent but must work when tested in browser | 5 |
| | | **Total mark for question** | 13 |

Question number	Answer	Additional guidance	Mark
3 (b)	Award **one** mark for each of:		4
	B1 createModalImage function called when the button is clicked (1)		
	B2 Background colour of page set to black (1)		
	B3 Image of cross displayed (1)		
	B4 Caption displayed (1)		
	Example code:		

```
<p><img id="cleaners" src="staff.jpg" alt="Our cleaning team" onclick="createModalImage()"></p>


// add your code here
document.body.style.backgroundColor = "black";
document.getElementById("cross").style.display ="block"
document.getElementById("caption").style.display="block"
```

Question number	Answer	Additional guidance	Mark
3(c)	Award **one** mark for each of:	Allow follow through for value of radio button	2
	C1 Finding the value of the radio button that has been selected (1)		
	C2 Display the value of the radio button with a suitable message (1)		
	Example code:		

```
7        function displaySelection(){
8          var radioButtons = document.getElementsByName("cleanFrequency");
9          for (var i = 0; i < radioButtons.length; i++) {
10           if (radioButtons[i].checked) {
11
12                // Add your code here
13                var frequency = radioButtons[i].value;
14                alert("The chosen frequency is " + frequency)
15           }
16         }
17       }
```

| | | Total mark for question | 10 |

Question number	Answer			Additional guidance	Mark
4	Award **one** mark for each of the following points up to a maximum of **fourteen** marks.				**20**
	Evidence expected in				
	A1	HTML – Head	Uses an external style sheet	1	

	A2	HTML – Body	At least one HTML5 semantic element used to define part of the page:
			    <header>
			    <nav>
			    <section>
			    <article>
			    <footer>
			    <main>
				1	

	A3	CSS	Content text is justified	1	

	A4	CSS	Colour set appropriately for at least one of:
			    header, footer – black (#000000)
			    content – beige (#F5F5DC)
			    headings – crimson (#C70039)
			    Clean and Gleam – white (#FFFFFF)
			    footer text – white (#FFFFFF)
				1	

	A5	CSS	Width set appropriately for at least one of:
			    logo – 100 pixels
			    body/header/content/footer – 1000 pixels
			    text area – 380 pixels
			    image area – 580 pixels
				1	

	A6	CSS	Clean and Gleam aligned as shown	1	
	A7	CSS	Clean and Gleam emboldened / H1 used	1	

	A8		Font size set appropriately for at least one of:
			    Clean and Gleam – 40 pixels
			    Headings – 20 pixels
			    Email Us – 14 pixels
				1	

	A9	CSS	Customer reviews text italicised	1	
	A10	HTML body /CSS	The three smaller images are in a row	1	
	A11	HTML body /CSS	All images as shown (proportions and placement)	1	
	A12	CSS	At least one image with rounded corners **OR**	1	

			at least one image with a solid border		
	A13	CSS	Email link is not underlined	1	
	A14	HTML – footer / CSS	Email Us centre aligned	1	

Award up to a maximum of **six** marks for the adherence to the component layout and the application of CSS using the levels based mark scheme below.

Topic Area	0	1	2	3	Mark
Adherence to component layout design	No awardable content	There is little adherence to the component layout design, leading to a solution that is not fit for purpose or is not suitable for the intended audience.	An attempt to adhere to the component layout design leads to a solution that is, in parts, fit for purpose and is, in parts, suitable for the intended audience.	The webpage fully adheres to the component layout design and style requirements. The resulting solution is fit for purpose and is suitable for the intended audience.	3
Application of CSS to control presentation		There is little attempt to make use of the facilities of CSS to control appearance and style. Most components rely on default configuration.	An attempt has been made to use CSS to control the appearance and style of some components. This has been successful in some cases.	Consistent and accurate application of CSS is used throughout to control the appearance and style of all components.	3
				Total mark for question	**20**

Question number	Answer				Mark
6	Award **one** mark for each of the following points up to a maximum of **11** marks.				20
				Marks	
	change Password .html	A1	Form value newPassword **OR** form value confirmPassword stored in a variable	1	
		A2	Check that the current password has been input	1	
		A3	Check if the new password matches the first value in the array **AND** the new password matches the confirmed password	1	
		A4	At least one error message is relevant to an error **OR** save message displayed	1	
		A5	All error messages are relevant to the specific error **OR** only one error message displays at a time	1	
		A6	Save message includes the old password and new password	1	
	costs.html	A7	Button added	1	
		A8	customerInfo div set to block when selection made (or equivalent) **OR** one of the given charges would display in the "hourlyCharge" paragraph when a customer type is selected	1	
		A9	Method of determining whether selection made is new customer or existing customer	1	
		A10	Hourly charge is correct for each of the selections made **OR** button is displayed when selection made is new customer	1	
		A11	Correct hourly charge would display in the "hourlyCharge" paragraph when selection made	1	

Topic area	0	1	2	3	Mark
Appropriate functionality: • components and code have been decomposed into appropriate parts • dynamic behaviours are implemented in JavaScript.		The component parts of the program are incorrect or incomplete, providing a program of limited functionality that meets some of the given requirements. Mostly inappropriate logic used.	The component parts of the program are complete, providing a functional program that meets some of the given requirements. Some parts of the logic are clear and mostly appropriate to the problem.	The component parts of the program are complete, providing a functional program that fully meets the given requirements. The logic is clear and appropriate to the problem.	3
Appropriate interface design: • error messages and other status reports • Interactivity between JavaScript and HTML		The design of the user interface lacks consideration for fitness for purpose and the intended audience.	The design of the user interface is in parts fit for purpose and addresses some of the needs of the intended audience.	The design of the user interface is fully fit for purpose and suitable for the intended audience.	3

Award up to a maximum of **nine** marks for the Functionality, user interface design, use of notation. Using the levels based mark scheme below.

Topic area	0	1	2	3	Mark
Appropriate use of notation: • presentation of JavaScript ensures clear readability • comments provide clarity.		Uses programming constructs and techniques to produce some required outcomes in the code. Uses data types that are rarely appropriate to the problem. Limited use of accurate syntax. Limited appropriate use and manipulation of data structures. Some use of meaningful variable names with limited or unhelpful commenting. Parts of the code are clear and readable but much of it makes limited use of appropriate spacing and indentation.	Uses programming constructs and techniques to produce most of required outcomes in the code. Uses data types, some of which are appropriate to the problem. Uses mostly accurate syntax. Accesses and manipulates data structures to produce mostly correct results and/or outcomes. Uses mostly meaningful variable names, with some use of appropriate commenting. Code is mostly clear and readable, making some use of appropriate spacing and indentation.	Accurate programming constructs and techniques are used. Appropriate data types are selected. Accurate syntax is used. Data structures are accessed and manipulated efficiently. Meaningful variable names and comments are used throughout. Code is clear and readable, making effective use of appropriate spacing and indentation.	3
				Total mark for question	**20**

Question 4 example code
CSS

```css
* {
    box-sizing: border-box; /* take padding into account a
}

body {
    width: 1000px;
    font-family: Arial;
    margin: 10px;
}

header, footer{
    background-color: ■#000000;
    color: □#ffffff;
}

header {
    padding: 20px;
}

.logo {
    width: 100px;
    float: left;
    margin-right: 20px;
}

.heading {
    font-weight: bold;
    font-size: 40px;
    margin-left: 20px;
    margin-top: 20px;
}

.content {
    background-color: □#f5f5dc;
    padding-top: 5px;
    padding-left: 20px;
    padding-right:20px;
}

article, .image-area, .one-half {
    float: left;
}
```

```css
article {
    width:380px;
    font-size: 14px;
}

article p {
    text-align: justify;
}

.image-area {
    width: 580px;
    padding-left: 20px;
}

h2 {
    text-align: center;
    font-size: 20px;
    background-color: ■#c70039;
    margin-bottom: 0;
    margin-top: 0;
}

.one-half {
    width: 49.3%;
}

.right {
    margin-left: 5px;
}

.reviews {
    font-style: italic;
}

li {
    padding-bottom: 10px;
}
```

```css
img {
    width: 100%;
    border: 1px solid;
    border-radius: 14px;
}

.small {
    width: 32.8%;
    margin: 0;
}

.large {
    margin-top: 5px;
    margin-bottom: 5px;
}

footer {
    padding: 1px;
    text-align: center;
    font-size: 14px;
    width: 100%;
}

a, a:hover {
    color: □#ffffff;
    text-decoration: none;
}

.clearfix {
    overflow: auto;
}
```

HTML

```html
1   <!DOCTYPE html>
2   <html lang="en">
3       <head>
4           <meta charset="UTF-8">
5           <meta name="viewport" content="width=device-width, initial-scale=1.0">
6           <title>Clean and Gleam</title>
7           <link rel="stylesheet" type="text/css" href="Q04FINISHED.css">
8       </head>
9       <body>
10          <header>
11              <div class="clearfix">
12                  <img class="logo" src="assets/logo.jpg" alt="C&amp;G logo">
13                  <div class="heading">Clean and Gleam</div>
14              </div>
15          </header>
16          <section class="content clearfix">
17              <article>
18                  <h2>About Us</h2>
19                  <p>Clean and Gleam is a family run domestic cleaning company with the combined experience within the cleaning industry for over twenty years.
20                      We offer professional cleaning services to make your home or apartment look its very best. From cleaning sinks, baths and tiles to polishin
21                      windows, our cleaners have the expertise to deal with every cleaning challenge.</p>
22                  <p>Let our staff customise a cleaning service programme to suit your individual needs and your budget.
23                      Whether you require a regular service (daily, weekly or monthly) or just a one-off service, you can count on Clean and
24                      Gleam for a cleaning service at excellent rates.</p>
25                  <div class="one-half">
26                      <h2>Customer Reviews</h2>
27                      <div class="reviews">
28                          <p>"Fantastic. Used for over 2 years."</p>
29                          <p>"The deep clean is well worth the money. Kitchen gleaming for a long time afterwards."
30                          <p>"Joel is fantastic. He has been doing my weekly clean for five months."
31                          <p>"I have found I only need a deep clean every three or four months as they are so thorough."
32                          <p>"Sofa and chairs cleaned up like new."
33                      </div>
34                  </div>
35                  <div class="one-half right">
36                      <h2>Services</h2>
37                      <ul>
38                          <li>Daily clean</li>
39                          <li>Weekly clean</li>
40                          <li>Monthly clean</li>
41                          <li>Deep clean specials</li>
42                          <li>Window cleaning</li>
43                          <li>Carpet and upholstery cleaning</li>
44                          <li>General laundry</li>
45                          <li>Bedding laundry</li>
46                          <li>Ironing</li>
```

```
47                        <li>House clearances</li>
48                    </ul>
49                </div>
50            </article>
51            <div class="image-area">
52                <h2>Images</h2>
53                <img class="large" src="assets/window.jpg" alt="image of ironing">
54                <img class="small" src="assets/ironing.jpg" alt="image of ironing">
55                <img class="small" src="assets/vacuum.jpg" alt="image of vacuuming">
56                <img class="small" src="assets/staff.jpg" alt="image of ironing">
57                <img class="large" src="assets/mirror.jpg" alt="image of polishing">
58            </div>
59
60        </section>
61        <footer>
62            <p><a href="mailto:info@cleanAndGleam.imp" title="Contact Clean and Gleam by email">Email us</a></p>
63        </footer>
64    </body>
65 </html>
```

Q06 Example Code

Change Password

```
16            // Add your code here
17            var storedPassword = usedPasswordArray[0]
18            var newWord = document.getElementById("newPassword").value
19            var confirmWord = document.getElementById("confirmPassword").value
20
21            if (pWord == "") {
22                alert("You must enter a password")
23            } else if (pWord != storedPassword) {
24                alert("Incorrect password")
25            } else if (newWord != confirmWord) {
26                alert("New password and confirm password do not match")
27            } else if (newWord.length != 8) {
28                alert("New password must be 8 characters")
29            } else if (usedPasswordArray.includes(newWord)) {
30                alert("You have already used this password" )
31            } else {
32                alert("Your old password " + storedPassword + " has been changed to " + newWord)
33                document.getElementById("changePassword").reset();
34            }
35        } // End of changePassword() function
```

Costs

```html
<!-- Add code for the button here -->
<button type="button" id="submit" onclick="signUp()">Sign up</button>
```

```javascript
// Add your code here
document.getElementById("customerInfo").style.display="block"
if (document.getElementById("customerType").value == "new") {
    document.getElementById("hourlyCharge").innerHTML = "Hourly charge per cleaner - £12.00"
    document.getElementById("submit").style.display="block"
} else if (document.getElementById("customerType").value == "existing") {
    document.getElementById("hourlyCharge").innerHTML = "Hourly charge per cleaner - £11.00"
    document.getElementById("submit").style.display="none"
}
// End of displayDetails() function
```