



Unit: Dynamic Websites

Assignment title: Air Pollution

20 Credit Version

Sample Marking Scheme

Markers are advised that, unless a task specifies that an answer be provided in a particular form, then an answer that is correct (factually or in practical terms) **must** be given the available marks. If there is doubt as to the correctness of an answer, the relevant NCC Education materials should be the first authority.

This marking scheme has been prepared as a **guide only** to markers and there will frequently be many alternative responses which will provide a valid answer.

Each candidate's script must be fully annotated with the marker's comments (where applicable) and the marks allocated for each part of the tasks.

Throughout the marking, please credit any valid alternative point.

Where markers award half marks in any part of a task, they should ensure that the total mark recorded for the task is rounded up to a whole mark.

Marker's comments:

Moderator's comments:

Mark:

Moderated mark:

Final mark:

Penalties applied for academic malpractice:

| Task | Guide | Maximum Marks |
|------|---|--|
| 1 | <p>Task 1 – Create a Landing Page for Air Pollution – 32 marks</p> <ul style="list-style-type: none"> <li data-bbox="344 344 1197 418">□ Compelling caption (up to 3 marks. Full marks to be awarded for attracting visits to the site) <li data-bbox="344 456 1021 490">□ Clean colourful backdrop (up to 2 marks) <li data-bbox="344 568 1235 674">□ Eye catching images (up to 4 marks). Full marks to be awarded for good choice of background and images of Air Pollution. Deduct marks for inappropriate images. <li data-bbox="344 712 1246 745">□ Scroll-triggered appropriate animations (up to 4 marks). <li data-bbox="344 824 1235 969">□ Automatically loading background video (up to 3 marks). Full marks to be awarded for at least one appropriate air pollution video that loads automatically – award 2 marks max if it doesn't load automatically). <li data-bbox="344 1008 1214 1153">□ Fluid layout (up to 4 marks). Award full 4 marks if the page layout adjusts to user's screen by using percentage widths. Deduct marks if not a fluid layout has been attempted but the css coding is not correct. <li data-bbox="344 1227 1251 1373">□ Animated/interactive social media buttons or navigation buttons (up to 3 marks). Award 1 mark for at least one media button, award 1 mark for at least one navigation button and award one mark for interaction/animation. <li data-bbox="344 1411 1230 1516">□ Two media links to relevant pollution websites (up to 3 marks if both relevant – 1 mark each if not wholly relevant) <li data-bbox="344 1554 1257 1771">□ At least one call to action button (up to 3 marks). Award three marks for a call to action button which meets the brief and grabs the user's attention. Award two marks max if the call to action button does not meet the design brief. Add one mark max for inclusion of the button but that is not relevant and eye-catching. <li data-bbox="344 1809 1257 1995">□ An offer of free home pollution testing kit a pop-up (up to 3 marks. Full marks to be awarded for a well-designed and fully-functioning pop-up which works well on the responsive landing page when the customer hovers over it. Deduct marks for inaccuracies.) | <p style="text-align: right;">3</p> <p style="text-align: right;">2</p> <p style="text-align: right;">4</p> <p style="text-align: right;">4</p> <p style="text-align: right;">3</p> <p style="text-align: right;">4</p> <p style="text-align: right;">3</p> <p style="text-align: right;">3</p> <p style="text-align: right;">3</p> <p style="text-align: right;">3</p> <hr style="width: 100%;"/> <p style="text-align: right;">32</p> |

| Task | Guide | Maximum Marks |
|------|--|---------------|
| 2 | <p>Task 2 Setup Database, Login and Registration – 18 marks</p> <ul style="list-style-type: none"> <input type="checkbox"/> The set-up page should create a table of clients with auto-incrementing primary keys set on the appropriate fields (3 marks). 3 <input type="checkbox"/> Appropriate data types and include a mechanism for booking online and incrementing customer counters accordingly (3 marks) 3 <p>The login and registration should include the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> A prompt to register if the username does not appear in the database or login fails 3 times (2 marks); 2 <input type="checkbox"/> If the login fails 3 times, then account should lock for 10 mins (2marks) 2 <input type="checkbox"/> Reset of attempts after 10 minutes (1 mark) 1 <input type="checkbox"/> Code to handle attempting to register an existing username (1 marks); 1 <input type="checkbox"/> Hashing password as a security measure (1 mark) 1 <input type="checkbox"/> Code to check the provided password against the stored password (2 marks); 2 <input type="checkbox"/> Code to create a new user when a registration is attempted (2 marks) 2 <input type="checkbox"/> Additional marks are available for making the login system more robust (1 mark) 1 <hr style="width: 100%;"/> <p style="text-align: right;">18</p> | |
| 3 | <p>Task 3 Create an online contact us form and FAQ area – 10 marks</p> <p>Typical structure for doing this might be:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create MySQL data for the form (3 marks) 3 <input type="checkbox"/> Install the script for your form (3 marks) 3 <input type="checkbox"/> Configure the form and responses including suitable call to action button (4 marks) 4 <hr style="width: 100%;"/> <p style="text-align: right;">10</p> | |

| Task | Guide | Maximum Marks | | | | | | | | | |
|---|---|--|-----|------|--|---|---|---|--|--|-----------------|
| 4 | <p>Task 4 – Additional Functionality – 20 marks</p> <ul style="list-style-type: none"> <input type="checkbox"/> Mobile accessible website which works on phone/tablet (7 marks) <input type="checkbox"/> Suitable use of web service (3 marks) <input type="checkbox"/> Responsive/adaptive pages based on user needs (5 marks) <input type="checkbox"/> Personalised content by adding the city name to the landing page header as a personal touch (using IP address) (5 marks) | <p>7</p> <p>3</p> <p>5</p> <p>5</p> <hr/> <p>20</p> | | | | | | | | | |
| 5 | <p>Task 5 - Modification of records –10 marks</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create a web enabled app that allows users to create, query, browse and manipulate the database (5 marks) <input type="checkbox"/> Allow front end users to create/query records currently they are browsing (5 marks) | <p>5</p> <p>5</p> <hr/> <p>10</p> | | | | | | | | | |
| 6 | <table border="1"> <thead> <tr> <th>0-3</th> <th>4-6</th> <th>7-10</th> </tr> </thead> <tbody> <tr> <td><i>Provides a brief description of the learning that occurred and a somewhat superficial analysis of its importance.</i></td> <td><i>Provides a description of the learning that occurred supported by some analysis which would benefit from more substance.</i></td> <td><i>Provides an in-depth description of the learning that occurred and a developed analysis of its importance.</i></td> </tr> <tr> <td><i>Produces a simple action plan that gives limited or vague detail on the activities that need to take place in order to improve learning or practice.</i></td> <td><i>Produces a sensible action-orientated action plan that provides some detail on activities that need to take place in order to improve learning or practice.</i></td> <td><i>Produces a comprehensive, action-orientated action plan that details clear activities that need to take place in order to improve learning or practice.</i></td> </tr> </tbody> </table> | 0-3 | 4-6 | 7-10 | <i>Provides a brief description of the learning that occurred and a somewhat superficial analysis of its importance.</i> | <i>Provides a description of the learning that occurred supported by some analysis which would benefit from more substance.</i> | <i>Provides an in-depth description of the learning that occurred and a developed analysis of its importance.</i> | <i>Produces a simple action plan that gives limited or vague detail on the activities that need to take place in order to improve learning or practice.</i> | <i>Produces a sensible action-orientated action plan that provides some detail on activities that need to take place in order to improve learning or practice.</i> | <i>Produces a comprehensive, action-orientated action plan that details clear activities that need to take place in order to improve learning or practice.</i> | <hr/> <p>10</p> |
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| Total: 100 Marks | | | | | | | | | | | |

Learning Outcomes matrix

| Task | Learning Outcomes assessed | Marker can differentiate between varying levels of achievement |
|------|----------------------------|--|
| 1 | 1, 2, 3 | Yes |
| 2 | 1, 2, 3 | Yes |
| 3 | 1, 2, 3 | Yes |
| 4 | 1, 2, 3, 4, 5 | Yes |
| 5 | 1, 2, 3 | Yes |
| 6 | 1, 2, 3, 4, 5 | Yes |

Grade descriptors

| Learning Outcome | Pass | Merit | Distinction |
|--|--|--|---|
| Understand the various tools and techniques used for Web Application development | Demonstrate adequate understanding of tools and techniques | Demonstrate robust understanding of tools and techniques | Demonstrate highly comprehensive understanding of tools and techniques |
| Be able to develop data-driven websites | Show adequate development | Show sound and appropriate development | Show innovative and highly appropriate development |
| Be able to apply the various tools and techniques used to build data-driven websites | Demonstrate adequate and appropriate application of tools and techniques | Demonstrate sound and consistently appropriate application of tools and techniques | Demonstrate detailed and highly appropriate application of tools and techniques |
| Understand the functions of web services | Demonstrate adequate level of understanding | Demonstrate robust level of understanding | Demonstrate highly comprehensive level of understanding |
| Be able to create and deploy web services | Demonstrate ability to perform the task | Demonstrate ability to perform the task consistently well | Demonstrate ability to perform the task to the highest standard |