



Unit:
Dynamic Websites

Assignment title:
Curious CyberSecurity

Summer 2019

Important notes

- Please refer to the *Assignment Presentation Requirements* for advice on how to set out your assignment. These can be found on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- You must read the NCC Education Documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensure that you acknowledge all the sources that you use in your work. These documents are available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- You **must** complete the *Statement and Confirmation of Own Work*. The form is available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- Please make a note of the recommended word count. You could lose marks if you write 10% more or less than this.
- You must submit a paper copy and digital copy (on disk or similarly acceptable medium). Media containing viruses, or media that cannot be run directly, will result in a fail grade being awarded for this assessment.
- All electronic media will be checked for plagiarism.

Introduction

Curious Cybersecurity are a research-based company founded in 2016, created by John and Steven Yung. Their ambition is to research and help companies with the human elements of cybersecurity with a view to developing *anti-phishing filtering solutions*.

The company formed when the brothers left University and were subject to a number of *phishing attacks* which disabled their website for a number of days. They produce press releases and provide training to companies with a view to strengthening cybersecurity defences.

The brothers are looking to increase their income from January 2020 and therefore they have asked you to develop a dynamic website for them. The website needs to include the following:

- **Home Page:** this will be a very striking landing page with a clean background colour. It must include a responsive navigation bar with responsive dropdown buttons to the different pages. The page should have a brief introduction to the company at the top third of the page which should also allow customers to enter their email address to “Get Started”. Once they have entered their email address a password box should appear, and they should confirm agreement to the terms and conditions. The next third of the page should include three images with text underneath these – one will say *In the News*, one will say *Awards* and one will say *Press Releases*. The last third of the page should include footer navigation including *Company*, *Product*, *Partners*, *Helpful Links* and *Policies* along with relevant social media buttons and the search bar should be included on a clean looking home page.
- **Services:** This page will provide up to date information about the different cybersecurity services the company offers. This page includes both an audio and video interactive files and disabled users should be considered here in terms of content.
- **Contact Us:** This page will allow customers to contact the business through and interactive form.
- **Our Approach:** This page should give customers an overview of the different training services that are offered
- **Location:** This page should include an interactive map of the business location in Chatsworth and an interactive online booking system to allow customers to book onto the relevant training sessions.

The website needs to include customer login which records invalid login attempts and locks the user out after THREE (3) attempts. The reset should be allowed after THREE (3) minutes. You have been commissioned by the owners to produce a web-based application, which will enable customers to register their interest and access other sections of the website. The website must be able to be viewed on mobile devices including at least two different devices and include accessible content, particular for the audio and video files.

The website should have a *cookie notification* which appears when the site is loaded which allows visitors to agree and proceed to accept *cookies* or request further information.

A database will need to be created to allow customers to create their own personal account. The system will store personal details of each customer, their first name, surname, business name, job title, area of cyber security interest and their email address. The database should be able to store the details and be searched when relevant articles are available in the area of cyber security interest.

A web enabled application needs to be created to allow users to create, query, browse and manipulate the database and allow the user to create and delete records they are currently browsing.

The website should include search engine optimisation and include an image slider with appropriate content on the home page. It should also include, social media buttons and a booking system for the training sessions.

Customers need to create their own account to log into the system via a registration script. Once they log in they should be presented with an interface that allows them to:

- Access their registration
- Update their information
- Change their password

You are expected to use a combination of *PHP*, *MySQL* and *JavaScript* to create this application. Your application should also make use of a web service for online bookings.

Task 1 – 10 Marks

Create a setup page and tables for the cybersecurity website including the online booking system and cookie notification message.

Task 2 – 15 Marks

Create the login and registration system. This should include *username and password* **and** store personal details **and** an email address. To gain the highest marks for this task you should make the system as robust as possible and it should allow reset after three (3) minutes.

Task 3 – 15 Marks

Once the customers have logged on they should have access to their registration record and book on the relevant training events. They should also be able to download relevant research papers once they have **agreed** to the privacy policy of the website. This should be created through php.

Task 4 – 20 Marks

The owners have asked for additional functionality for the website. Implement the following features:

- Mobile accessible website on at least two devices
- Terms and conditions agree message
- Cookie accept and agree message

- Social media buttons and inclusion of relevant media to enhance the web page design
- Home page with striking landing page (as outlined on page 2).

Task 5 – 15 Marks

Ensure that front end users can create/query/delete/update their records that they are currently browsing by using an appropriate web-enabled application.

Task 6 – 10 Marks

Include a customer registration number generator – this should auto-generate six-digit numbers with a prefix of **CUR** (plus the six digits).

Task 7 – 15 Marks

You are required to write a 500-word reflection on this activity. Answer the following questions:

1. What have you learnt?
2. How could the system be improved or further developed to become more accessible for disabled users?
3. Which parts of the development did you find most difficult and why was this?
4. How did you overcome these difficulties?

Submission requirements

- For each task, you should present the necessary code and screen dumps in a word-processed document.
- All references and citations must use the Harvard Style.

Candidate checklist

Please use the following checklist to ensure that your work is ready for submission.

- Have you read the NCC Education Documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensured that you have acknowledged all the sources that you have used in your work? ☐
- Have you completed the *Statement and Confirmation of Own Work* form and attached it to your assignment? **You must do this.** ☐
- Have you ensured that your work has not gone over or under the recommended word count by more than 10%? ☐
- Have you ensured that your work does not contain viruses and can be run directly? ☐