**All content needed for Unit 1 & Unit 2 (website project)**

There are 20 points we have to answer as written content for our coursework. We can get a start on some now, but others are a review that we can only write once reflecting on our websites that we make.

For each point you must have at least a paragraph/a few sentences of content.

Refer to this document to ensure you’ve written all required content. Taken from Unit 1 and Unit 2 assignment briefs.

**Unit 1: Improving productivity with IT**

**Unit 1, Outcome 1**

Plan, select and use appropriate IT systems and software to meet needs

You are wanting to set up as a consultant. To prove your knowledge you want to start by creating a blog talking about yourself, why you are interested in technology and demonstrate how much you know. For each of the sections below asking you to describe, include around a paragraph of information about the topic.

1.0 Start by writing an ‘about me’ section about your background, why you decided to come to Code Nation and about your experience so far

From the early years I was interested with computers,   
I had Commodore 64, Amiga 600 and 1200, early PC 286 25MHz, through few generations of Pentium, until I7 which I am using currently.   
I have finished IT school with a diploma as IT Technician back in Poland in 2005.  
For few years I used to work in PC shop configuring and building computers for clients individual orders.   
  
After years of absence in IT industry I have decided to back on the track. In 2018 I have accomplished College on ICT Systems and Principles for IT Professionals(MTA - Microsoft Technology Associate) But even without working full time in the IT I have continuously repairing, configuring and helping people to keep their computers up to date.   
  
As soon I heard about Code Nation courses I decided to jump into it and gain new interesting skills in IT.   
I am flexible, willing to learn new skills

1.1 Describing the purpose of IT in modern business

Information Technology became a vital and integral part of the XXI century life. From multi-national corporations to small companies, everyone these days is using IT for business.  
The presence of the computers in business can best be determined by looking on how it is being used in all over the world.

Lets show some examples:

**Communication between employees, suppliers and customers.**   
For many companies, emails is the principal means of communication between employees, suppliers and customers. Using voip, email, text, video and audio live chats is a must have in XXI century businesses.

**Inventory management Systems**  
Inventory Management Systems track the quantity of each item that company maintains, triggering and order for additional stock when the quantities fall below a pre-determined amount. To get best results these inventory management systems should be connected to the point-of-sale (POS) system which ensures that each time an item is sold, that item is removed from the inventory count creating a closed information loop between all departments.

**Data Management Systems**  
Nowadays companies stores digital versions of their files on servers and storage devices. These files are instantly available to everyone in the company, regardless on their geographical location. Companies are able to store tremendous amount of historical data and employees benefit from immediate access to the document they need.

**Management information systems**  
MIS is a computer based system which is created for organisation (i.e. managers) to organise and evaluate information and data and provide information in a timely and efficient manner. This also helps managers to analyse and make decisions based on the information and analysis that MIS provides.

**Customer Relationship Management**  
CRM is an approach to manage a company’s relationship with current or potential customer. It uses data analysis about customer’s history with a company to improve business relationship with customers, specifically focusing on customer retention and ultimately driving sales growth.   
  
SOURCE:  
**<https://smallbusiness.chron.com/information-technology-its-role-modern-organization-1800.html>**

1.2 Describing methods, skills and resources needed to complete digital projects successfully – what do you need to make projects successful? What tools? What skills?

All team members must have minimum basic IT skills, willingness to learn and very good communication skills. Ability to work as part of a team is essential as well as positive attitude and open minded personalities is also recommended.

Proper planning and using desirable software must be implemented from the beginning. For example, using Slack for communication between team members, sharing ideas and files, anytime - anywhere, and Trello board (Kanban method) software for preparing a list of “to do, doing and done” where team members will create a plan of every step of their project.

Splitting jobs between members of the team especially by finding strong abilities of each person and also their weaknesses will help the team to assign each part of the project to the best person.

Results of the entire project is dependant on tiny bits of the planning, making, managing time, team working, error checking and testing.

1.3 Plan and carry out tasks using IT – e.g. making your website. How will you plan it? Include a link to your Trello board.

Planing website should be well prepared from the beginning.   
Using Trello (originated from Kanban (Japanese 看板 - signboard or bilboard)   
a web-based list-making application where user is able to plan a list of   
“to do, doing and done” tasks. Thanks to graphics interface work items are visualised to give participants a view of progress and process.   
This part is mostly essential to proper planning each step of preparing and doing process. Below there is a link to my Trello board:  
<https://trello.com/b/L6YD1c97/websiteproject>

Choosing appropriate content, web developer software, web layout, fonts, colours etc is essential in every web development project.

1.4 Describe the risks that might impact digital projects – what causes digital projects to fail? Why?

As every project we need to bear in mind that not everything might go as we planned. Even a well planned project might struggle with problems. One of the risks leading to fail the project might be human error (i.e. lack of experience in IT), computer interruption/failure (virus or malware, software crash, hardware overheating or permanently crashing as a result of ) or poor team cooperation. Misinterpretation of project assumption might also lead to project failure.

1.5 Describe how you would go about selecting and using IT systems and software – how do you select the right kind of technology for the job?

Due to the specification of CodeNation course Develop: Coding we were designated to use MacBook Pro 13” (2017) 2.3 GHz Intel Core i5 , 16 GB 2133MHz LPDDR3 with Intel Iris Plus Graphics 640 1536MB macOS Mojave 10.14.5   
We are using Slack, Trello, Visual Studio Code.   
As for previous Coffee Shop iOS app project this configuration seems to be not powerful enough, but for the web design should be sufficient.   
  
  
  
For this specific project I am using Trello board to make a written plan for each step of my work i.e. “To do-doing-done”, text editor for making this text document,   
Visual Studio Code for coding in HTML & CSS, internet for finding helpful sources like [https://www.w3schools.com](https://www.w3schools.com/) and content for entire work.

1.6 Describe and provide analysis on how your chosen technologies have helped you achieve your outcomes. – How has Trello helped you plan and how can git and GitHub help with your codes version control   
  
When preparing for this project I realise that using Trello board is very useful in terms of planning project from earliest stages, implementing ideas through board, managing time for each part of the project.

From early planning, throughout implementing ideas, to the very end of the project thanks to the Trello and its ability to change the content and position of each board at any time.   
  
Git and GitHub:  
Git is a distributed version-control for tracking changes in source code during software development. It is designed for coordinating work among programmers but it can be used to track changes within any set of files.   
Github is an American company that provides hosting for software development version control using GIT. It offers all of the distributed version control and source code management (SCM) functionality of GIT as well as its own functionality.

1.7 Describe legal guidelines and constraints that impact digital projects – How does GDPR impact digital projects?

GDPR stands for General Data Protection Regulation and was created by EU as regulation in EU law on data protection and privacy for all individual citizens go the European Union (EU) and The European Economic Area (EEA)  
  
GDPR aims primarily to give control to European citizens to control over their personal data and to simplify law for international businesses by unifying the regulations within EU. Those individuals or companies who’s not restrict GDPR regulations, might be fined up to 4% of their global revenue or 20 million Euros, whichever is greater.   
  
In short term under this regulation no one should use other individual or company personal data or intellectual property without consent.

**Unit 1, Outcome 2 (Review)**

Review and adapt the ongoing use of IT tools and systems to make sure that activities are successful

Now you have setup your blog, it’s time to get into the detail. You now need to critically review your website. To the bottom of your website add a review section that contains the following information.

2.1 Review the ongoing use of IT tools and change approach as needed – in making your own website, are you happy with the tools you used? E.g. Visual Studio Code, Trello.  
  
2.1 answer:   
MacBook Pro which I have used for this project was something new to me. Its iOS or great trackpad was something that I liked from the first sight. Using it during three week course gave me basic knowledge about   
Mac, iOS, Visual Studio Code, Trello.   
  
As a person who’s never use VSC before I can admit that Visual Studio is good for the Blog website project. Coding in html and css in it is great new experience even with just minimum knowledge about coding. I can admit that menu of VSC is user friendly.   
  
Using Trello for the first time was also a great experience, intuitive menu, simple and user friendly UI is an advantage of Trello board. “To do-doing-done” board is something  
that I definitely will use for future projects.   
Combination of those three is giving user a great tool to plan, make changes and work on the project in effective   
and user friendly way.

2.2 Describe whether the IT tools selected were appropriate E.g. Visual Studio Code, Trello   
  
2.2 answer:   
  
Compatibility of the Visual Studio Code is one of its greatest options. As a source code editor that can be used with major programming languages is perfect for user multi directories work. Several of them are included, for example JavaStript, TypeStript, CSS art HTML but other language extension might be downloaded form the VS Code Marketplace. It’s versatile and user friendly UI is something that is worth to mention.   
  
Trello functionality and simplicity in terms of planning and making list of “to do-doing and done” is great.   
Ability to make a drag-and-drop tasks list is its core function. Trello is simple and intuitive, either you need to do a project or simple to-do list, it want disappoint you.

2.3 Assess the strengths and weaknesses of your final project – are you happy with your website? Why? Why not? You should review it on the website itself in the interests of openness. What would you change?   
  
2.3 answer:  
After few days of trying to build simple website I can admit it could do better. Due to the time restrictions I couldn’t implement more things like animated background, music, or video played straight on the blog in scaled window.   
  
As for simple webpage with menu, static but nice looking background and loads of content, I have to said I’m satisfied but my webpage is far away from perfection.   
It is just a simple example of how to use HTML and CSS   
I was trying to concentrate on content and to find appropriate sources for blog to be published.

2.4 Describe further improvements you can make to your project

2.4 answer  
  
As i stated in previous paragraph, the blog have some drawbacks or imperfections due to its simplicity but in the future I would like to add animated background, window with scalable video from YouTube showing tutorials for Visual Studio Code and Trello.   
Adding option for chilling music to be played on the blog would be also a good idea.   
There is so many possibilities to expand usefulness for the simple blog that implementing all of them would take months to complete.

2.5 Review outcomes to make sure they match requirements and are fit for purpose   
  
  
2.5 answer  
  
  
Unit 1, Outcome 3 (Review)

Develop and test solutions to improve ongoing use of IT tools and systems

3.1 Review the benefits and drawbacks of IT tools and systems used in terms of productivity and efficiency – could you have been more efficient when making your website? How? Could you have done it in teams?   
  
3.1 answer:  
Using MacBook Pro was enough powerful for this project.   
Software used i.e: Visual Studio Code and Trello perfectly fit for purpose they’ll been make. Off course as a first time user I haven’t got time and possibilities to find software drawbacks to stated in this project.   
  
Of course as a first time user, I haven’t got enough time and possibilities to find software drawbacks as we are using Mac’s only in Code Nation. Probably if i have chance to work with this software for a longer I could make a list of pros and cons.   
  
Doing this project in a team would be beneficial, for example, one of the team members could concentrate on finding sources and content over the internet, other could work on website layout, fonts etc. when rest of the team could concentrate on coding.   
  
Doing everything on my own was more challengeable but gave me more satisfaction from being one-man-army. ;-)

3.2 Describe ways to improve productivity and efficiency   
  
  
3.2 answer  
Time management in project like this is very important but most important is knowledge about coding and proper planning from the first step of starting any project.   
  
Comfortable and silent place for working on a project would be also beneficial.

3.3 Develop solutions to improve own productivity using IT in digital projects – what would you do differently next time? Team work? Use of Slack?   
  
3.3 answer  
I think I could manage my time in a better way.   
From first minutes of the project, after sketching it in Trello, I should give myself deadline for each tasks to be finished. Having a limited time for each tasks would help me to avoid backlog in my project.

3.4 Describe how you would go about testing digital solutions

**Unit 2: Website Software**  
**Unit 2, Outcome 1**  
Create structures and styles for a webpage

You are setting up as an independent consultant, which is very exciting, however, you’re going to need a website of your own to highlight your skills, availability and areas of work. It’s time for you to create a website that details you, and including pages/sections and a how you built it page:

1.1 Describing the content and layout for each page  
1.5 Describing copyright and other constraints affecting websites

1.6 Describing access issues that need taking into account - describe issues that people with disabilities may face when using webpages and how we can overcome them

1.7 Describe which are the appropriate filetypes for websites