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## Practical 1: Website Design

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**Due date:** Wednesday, 17 July 2024

**Submission deadlines:** Group A @ 16h45  
Group B @ 19h45

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### Instructions:

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1. Save this file to your computer.
2. Rename the file as follows: **Practical1\_2024\_YourSurname\_YourInitials.docx**
3. Open your file in **MS Word** and type the answers to each question in the open space provided underneath each question. There is no limit to the length of the answers, but you must answer all the questions.
4. Submit the completed MS Word document on Blackboard. (You will find the "Submit Practical 1" link on the "Activities & Assignments" page of Unit 1.)

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### Question 1

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Type your initials, surname and student number here:

[BT. Mohlala (2025355740)]

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### Question 2

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#### Background Information

You have recently completed the first part of a Web Development course and you feel confident that you can develop your first functional website. As you are only familiar with the basics of web development, you decided to develop a static website that consists of no more than six web pages. ("Static" means that the content of all your web pages will be fixed. Users will therefore just be able to view information on your site without having any additional "interaction" with the site).

Answer the following questions regarding this website:

- 2.1 **What will the topic/subject of your website be?** (Try to be creative but select a topic that you are already familiar with. You are not allowed to develop a "personal" website – about yourself. If you are repeating CSIS1664 you must select a different topic than the previous year(s).)

[WITNESS & SONS Refrigeration & Air-Conditioning]

- 2.2 **What will the main purpose or goal of this website be?** (Why do you want to make information about this topic available to people?)

The goal/purpose of this website will be to introduce a business to potential clients and to stay engaged with the loyal/existing customers.

- 2.3 **Why have you selected to develop a website on this topic/subject?** (What is your personal reason/motivation for developing this website?)

I want to develop this website because it will help my father's business to grow as it will be exposed to potential clients and customers will be able to get the information they want regarding the services offered rather than from word of mouth, **and they will be able to make bookings online.**

**2.4 What kind of people do you think will be interested in the information on your website? (Primary target audience? Secondary target audience?)**

The primary target audience of this website will be homeowners, commercial-building owners and property management firms.

The following people (secondary target audience) might also be interested in this website:

- Electrical engineering students may be interested in the website to know about HVAC business/company.
- Entrepreneurs who would like to start such business may refer to the website to have an idea of what is required of them to run the business.

**2.5 What kind of information would you like to include on this website?** (Create a "brainstorm" list of all possible content items you want to include on this website. Be as specific as possible. **Note: The content items you list here cannot be used as "page topics" in Question 2.7.)**

- Highest qualification of the business owner
- Workplace policy
- Alternative contact
- ~~Protective gear~~
- ~~Tools~~
- ~~Identifiable hazards~~
- HVAC Health and Safety Policy
- Working/operational hours
- Location of the company
- Expected behaviour of workers
- Links to reviews from customers
- Links to images of services offered
- ~~Online chat with an AI~~
- List of areas that the company covers
- List of dates when the company is not operating
- ~~List of previous customers with email links for personal reviews~~
- Mailing address of the owner
- Name of the owner
- Phone number
- Picture of the owner
- Picture of the workers
- Picture of the customers
- Title of the owner

- Email address of the owner
- ~~Physical address of the owner~~
- Requirements for bookings
- Pricing
- Banking details
- History of the company / How the company came about
- Office number
- Consultation hours
- Email address of the company
- Personal phone number
- Articles

- 2.6** Review the “brainstorm” list that you have compiled in Question 2.5. Use the Strikethrough font effect on the Font menu to “scratch out” all the content items that you no longer want to include on the website. (e.g. ~~Fax number~~)
- 2.7** You now need to categorise the remaining content items from Question 2.5 (all the items that are not scratched out) to determine which content will appear on each of the web pages of your site. At this stage you must have enough content for at least six web pages. (Ideally each page/category should be dedicated to one main aspect of your website topic/subject.)

Page 1
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**Page topic: About Us**

**Content items (from Question 2.5) to be included on this page:**

- History of the company / How the company came about
- Location of the company
- List of areas that the company covers
- Working/operational hours
- List of dates when the company is not operating
- Links to images of services offered

Page 2
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**Page topic: Contact**

**Content items (from Question 2.5) to be included on this page:**

- Phone number
- Alternative contact
- Email address of the company
- Online chat with an AI

Page 3
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**Page topic: CEO**

**Content items (from Question 2.5) to be included on this page:**

- Office number
- Consultation hours

- Title of the owner
- Picture of the owner
- Personal phone number
- Email address of the owner
- Mailing address of the owner
- Name of the owner
- Highest qualification of the business owner

<b>Page 4</b>
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**Page topic: Prices, Bookings & Payments**

**Content items (from Question 2.5) to be included on this page:**

- Banking details
- Pricing
- Requirements for bookings

<b>Page 5</b>
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**Page topic: Rules and Policies**

**Content items (from Question 2.5) to be included on this page:**

- Workplace policy
- Expected behaviour of workers
- HVAC Health and Safety Policy

<b>Page 6</b>
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**Page topic: Reviews**

**Content items (from Question 2.5) to be included on this page:**

- Links to reviews from customers
- Articles

**2.8 Where are you going to get the content information (text) that you want to display on this website?**

- **List all the content that you already have in electronic format:**  
Articles  
Images  
Presentations
- **List all the content that you will write from scratch:**  
Description of services offered  
Portfolio
- **List all the content that you will get from the Web:**  
Copyright free images

Links to other helpful sites

**2.9 Where are you going to get all the "visual" resources (e.g. photos, images, logos) that you want to display on this website?**

- **List all the visual resources that you already have in electronic format:**  
Images of an installed air conditioner  
Images of a fixed refrigerator  
The logo of the company
- **List all the visual resources that you will create from scratch (e.g. photos that you will take yourself):**  
Images of a worker installing an air conditioner  
Photos of satisfied customers
- **List all the visual resources that you will get from the Web:**  
HVAC Marketing images  
Plumbing images

**Question 3**

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(The following questions relate to the website described in Question 2.)

**3.1 What type of website structure (e.g. linear, tree-like hierarchy, mixed or web) do you intend to use for your website? Give at least one reason for your choice.**  
**Web-like structure. It allows users to jump freely to any page from any other page.**

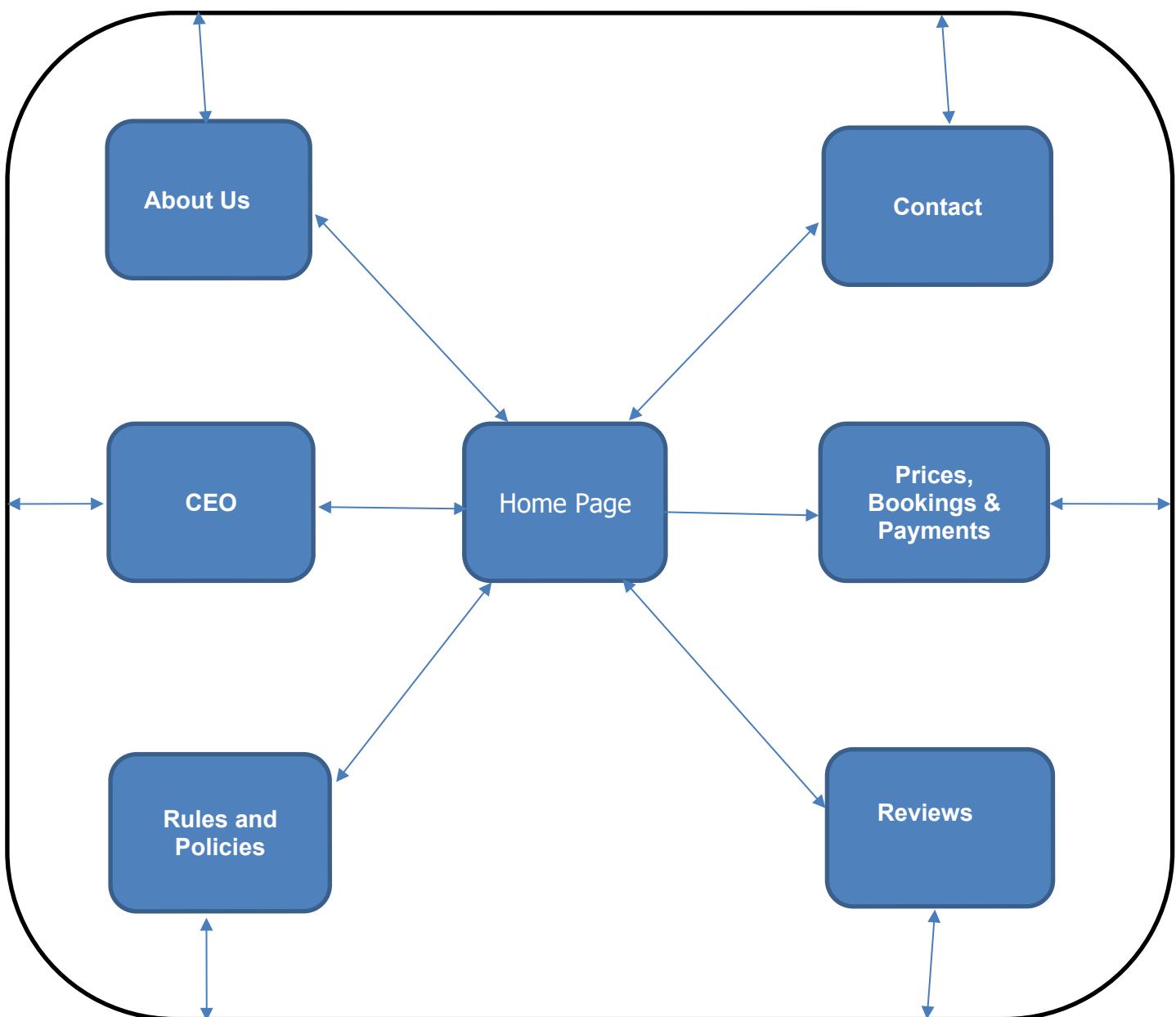
**3.2 Draw a sitemap diagram for your website.**

Your sitemap diagram must include the six pages you have identified in Question 2.7 and indicate how these pages will be "connected" to create the website structure you selected in Question 3.1.

You can use any of the following "methods" to create your diagram:

- Draw the diagram below using MS Word Shapes.
- Draw the diagram using any graphics application (e.g. MS Visio, Google Drawings, ...) and paste/insert the diagram below.
- Draw the diagram on a piece of paper. Take a photo with your cellphone and paste/insert the photo below.

**(Paste/Insert/Draw your sitemap diagram here.)**



#### Question 4

You have decided to search the web for some inspirational ideas for your website. You hope that by looking at other websites, that are similar in nature to the one you are planning, will provide you with some additional ideas.

##### 4.1 Which search engine are you going to use for your search?

Google chrome

- 4.2 What are the exact search terms that you intend to use in this search to help ensure that you locate suitable and relevant websites?**

Best HVAC website examples  
Most recommended HVAC companies  
Lack of services in the HVAC industry

- 4.3 You now need to go and perform the actual search.** (You must use the search engine indicated in Question 4.1 and the exact search terms you specified in Question 4.2. **If you find that the selected keywords do not return the desired results you need to adapt/change your answer to Question 4.2 and re-do the search).**

#### **Search Engine Results**

- 4.3.1 Make a screen capture of the search engine's results page and paste the picture here.** (Please make sure that the top/first part of the search results page is visible on the screen capture).

**(Select this line of text and press Ctrl+V OR select the Paste button on the toolbar to paste the Clipboard image here.)**

Google Best HVAC website examples

All Images Videos Shopping News Books Web More Tools

**Sponsored**

 Capterra https://www.capterra.com › hvac › free-list ::

**Top 10 HVAC Systems - Industry Leading Systems List**

✓ Business identity verified — Easily Find The **HVAC** Systems You're Looking For w/ Our Comparison Grid. Find the **Best HVAC** Systems That Will Help You Do, What You Do, Better. Latest Industry Research.

**Sponsored**

 GetApp https://www.getapp.com ::

**Top 10 HVAC Service Software - See a Free List of Software**

✓ Business identity verified — Explore **HVAC** Service Software Other Technology Users Swear By - Start Now

**Sponsored**

 LG https://www.lg.com ::

**HVAC Experts - Leading Innovation**

✓ Business identity verified — LG Air Conditioners Let You Manage Your Climate Via An Individual Or Central Solution.

 createtoday.io https://createtoday.io › examples › best-hvac-websites ::

**13 Kickass HVAC Websites: Make the Best Website**

04 Feb 2024 — The Ultimate List of **Best HVAC Websites** and Inspiration · Kensington Mechanical · Paragon Mechanical · ABS Heating & Cooling · AC Authority · AirTec.

 Jobber https://getjobber.com › HVAC Business Resources ::

**15 Great HVAC Websites (+ How to Make Yours Better)**

Google Most recommended HVAC companies X |

All Images Shopping News Videos Maps Web More Tools

In the world Open now To work for Top rated Online estimates

**Sponsored**

capeclimate.co.za  
<https://www.capeclimate.co.za> discount, sales

**Cape Climate Air Conditioning**  
Awarded #1 Residential Aircon — Awarded The #1 Residential Air conditioning **Company** in Western Cape. Contact Us Suppliers

**Sponsored**

Aircon Premier  
<https://www.airconpremier.co.za> suppliers, air-conditioner

**Repair, Install & Maintenance - We Will Beat Any Written Quote**  
We Repair Using Only Original Parts From The Manufacturers. Repairs Done On Site

### From sources across the web

Elvis Air Heating & Cooling LLC	Masters Heating & Cooling
Vital Heating & Air	Cool-it Air Conditioning Heating
Alpha Heating & Cooling Llc	Carrier

15 more ▾

Forbes  
<https://www.forbes.com/home-improvement/best-hv...>

**Best HVAC Companies Of 2024**  
25 Jun 2024 — **Best HVAC Companies** of 2024 · Trane · Carrier Heating and Cooling · Lennox

The screenshot shows a Google search results page for the query "Lack of services in the HVAC industry". The results are as follows:

- mixtelematics.com**: HVAC Challenges Solved: Telematics' Role in Boosting ...
 

The HVAC industry, like many others, faces a shortage of skilled labor and contractors, and the reasons behind this scarcity remain unclear. It's uncertain if ...
- People also ask :**
  - What are the common problems of HVAC?
  - Why is there an HVAC shortage?
  - What are the services of HVAC?
  - What is a potential challenge in the future of the HVAC system?
- patriotair.com**: 6 HVAC Industry Challenges & 5 Emerging Trends - Patriot Air
 

Today, labor shortages, lack of raw materials, and jammed ports have contributed to a slower manufacturing process of HVAC equipment and systems. In turn, HVAC ...
- Archdesk**: HVAC Industry: Challenges
 

29 Jun 2021 — The lack of skilled employees is not the end of the internal problems! The HVAC sector offers services that are often time-consuming and ...

- 4.3.2** Visit the **first three (3)** websites (links/hits) that were returned by the **search engine** for this search and add each site's information to the following table: **(Do not select any sponsored/paid links)**

Name of website	How relevant is the information on this site/page to your project? [Select % between 0 and 100]	Paste complete URL here

<b>S it e 1</b>	Capt erra	43%	<a href="https://www.google.com/aclk?sa=l&amp;ai=DChcSEwitz8b7wa6HAxWsU0ECHSIImCRQYABABGgJ3cw&amp;ase=2&amp;gclid=CjwKCAjw1920BhA3EiwAJT3ISGRwJKkcATF53OZMRr9Rb12N0b2nU-aT9NsWfqXRk2teJINcGz1JR0CgLwQAvD_BwE&amp;sig=AOD64_09UQ4SmLnnu3AYwuF0QKobJR0qBg&amp;q&amp;nis=4&amp;adurl&amp;ved=2ahUKEwjOu8D7wa6HAxU-3AIHHcrKAAkQ0Qx6BAgEEAE">https://www.google.com/aclk?sa=l&amp;ai=DChcSEwitz8b7wa6HAxWsU0ECHSIImCRQYABABGgJ3cw&amp;ase=2&amp;gclid=CjwKCAjw1920BhA3EiwAJT3ISGRwJKkcATF53OZMRr9Rb12N0b2nU-aT9NsWfqXRk2teJINcGz1JR0CgLwQAvD_BwE&amp;sig=AOD64_09UQ4SmLnnu3AYwuF0QKobJR0qBg&amp;q&amp;nis=4&amp;adurl&amp;ved=2ahUKEwjOu8D7wa6HAxU-3AIHHcrKAAkQ0Qx6BAgEEAE</a>
<b>S it e 2</b>	Cape Clima te	78%	<a href="https://www.capeclimate.co.za/?https://www.capeclimate.co.za/&amp;gad_source=1&amp;gclid=CjwKCAjw1920BhA3EiwAJT3ISUVzg05TwgDIc3Jy6uhxg6W8TCxf3bzPdNzJ-ObowiBsx9CloykTRoCj_sQAvD_BwE">https://www.capeclimate.co.za/?https://www.capeclimate.co.za/&amp;gad_source=1&amp;gclid=CjwKCAjw1920BhA3EiwAJT3ISUVzg05TwgDIc3Jy6uhxg6W8TCxf3bzPdNzJ-ObowiBsx9CloykTRoCj_sQAvD_BwE</a>
<b>S it e 3</b>	Mixte lemat ics	60%	<a href="https://www.mixtelematics.com/us/resources/blog/overcoming-challenges-facing-the-hvac-industry/">https://www.mixtelematics.com/us/resources/blog/overcoming-challenges-facing-the-hvac-industry/</a>

#### 4.4 Reflect on the websites that you have visited.

##### 4.4.1 What have you learned from this search exercise?

I have learnt to think critically and be able to identify keywords in a search in order to avoid to get results that are misleading or incorrect results.

##### 4.4.2 Which new ideas did you get for your own website?

I should include frequently asked questions (FAQs) tab and I should also include the highest qualifications/ academic degrees of the superiors in the company to let customers/potential clients know that they are in safe hands.

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