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WEDE5020 – POE PART1

Student number: 10186913

Business name: Inozon Engineering
Business Logo:

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WEB DEVELOPMENT POE OUTLINE PART 1

Website Choice

Information about business:

Business name: Inozon Engineering

Link

n/a

Motivation about choice:

The website I will be creating is based on a small Engineering company established and registered 2 years ago (During Covid). I am aware of this company because it was started up and is currently run by a family member of mine. They currently do not have any sort of online presence regarding company information, products and services, only proof of their company's registration and legitimacy. Due to this grey area, local customers are hard to find. This includes individuals looking for an Engineering service or other companies looking for someone who can do a particular job for them. Over the years they have established a small group of small/medium and large companies who have requested their services and products. Yes, there is an increase in their sales through connections but creating a website for them will be seen as a professional and modern way of publicising and marketing their company, products and services. It will also draw in an increased number of potential customers because they now have a website that has been properly put together to showcase their business. This also means that their acknowledgement is not only locally restricted but allows for international recognition as well. The company is also no longer restricted to advertisement through a mutual but also by an individual simple searching "engineering" could have their company pop up as part of the results which increases awareness of their existence. The company will no longer be limited to their working hours anymore, access about where they are and what they offer will now be available to the public 24/7. Lastly why I chose the company is because of my close relations to the owner. This makes gathering information about their business easier for me and it allows them to put in their own input on how they want the website to be structed. As much as this is my project, with their help and insight the website can be catered to their desire, especially if they wish to use it in the foreseeable future.

Website Assets

Objectives of a business having a website
- Marketing of the company's products and services
- Modernizing the company's brand
- Allow for international recognition.
- Creating an online presence for the company
- Increase in sales
- Allows for business awareness through search engines
- Interact more with users (specific audience target) online
- Tracking the success of your business online
- Increase the rate of return on investment

Assets

Media resources needed to create this website include images of the business logo, products they manufacture including gears and a water pump. Videos that will be used will be placed in the gallery section of the website. These videos will demonstrate how the products they manufacture (gears and water pumps) are used or ready to be shipped off to a customer. Due to a majority of the services being based on consultations, repairs and length for someone looking for quick information, a list of the services will be there as well a summary of the services in the form of an infographic/pictorial checklist done on a Canva. A majority of the images and videos are going to be sources by the owner and placed in Gallery, while the rest will be from Google Images.

Text information is all the information of the business. This includes when the business was registered, what type of business it is, more about them as a brand, their mission statement, what products and services they provide, their contact information and location.

Graphics like the logo will be sourced by the owner of the business. The icons I am going to use for email, phone, location and trading hours are going to be sourced through google search, specifically a website called iconscout.com.

The **Domain name** is going to include the name of the business, their type of business they will be and the country they are based in due. Due to company being based in South Africa it will end with .co.za. The honest name will be inozon engineering.

Website Pages and Content

Homepage:

- The logo
- Location
- The name of the company
- The slogan (If provided)
- Navigation menu (abouts, products and contact info)
- Photos (The offices from the outside, the workshop, the machinery they have made, include other necessary ones as well).
- Videos (The machines being made and machinery used)
- Can add a short overview of the other navigation options
  - About
  - Services
  - Contact: Location (A google maps insert if possible)

About page:

- When the business was established
- What relationship they aspire to achieve with Customers
- Proof of company registration (since it is a small/medium business)
- What the company is about
- The goals of the company
- Could include partnerships??
- How they have improved their services and products from the first time they started the business

Products and Services:
- The types of machinery they have made.
- Types of services they provide.

Gallery:
- Images of the work they can do.
  - Helical gear (Motions, 2023)
- Images of the work they have done.
- Videos of manufactured goods in action.

Contact page:
- Contact info.
- Location on how to get to their workshops
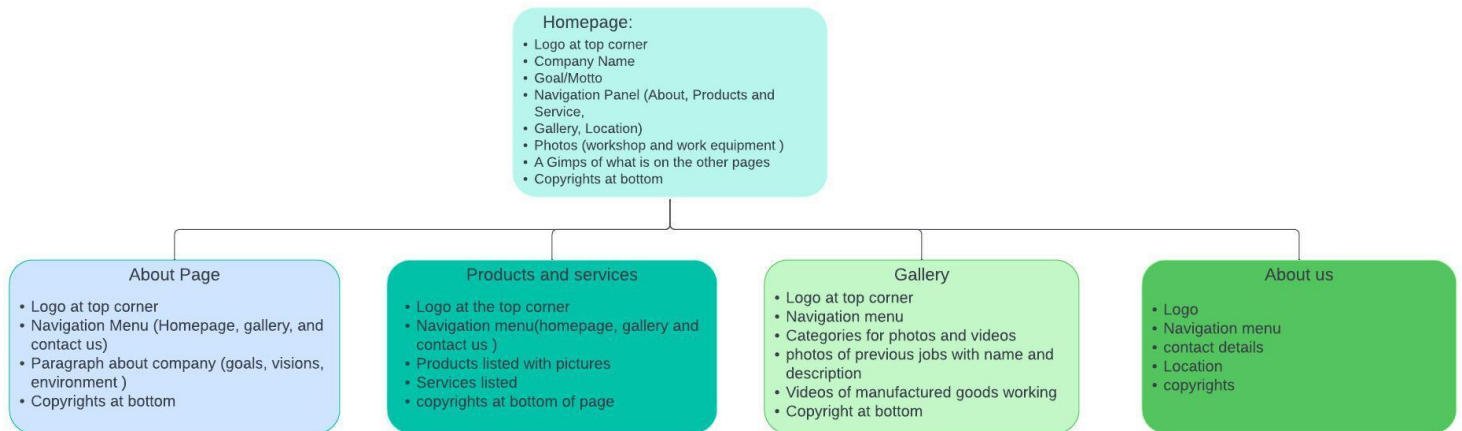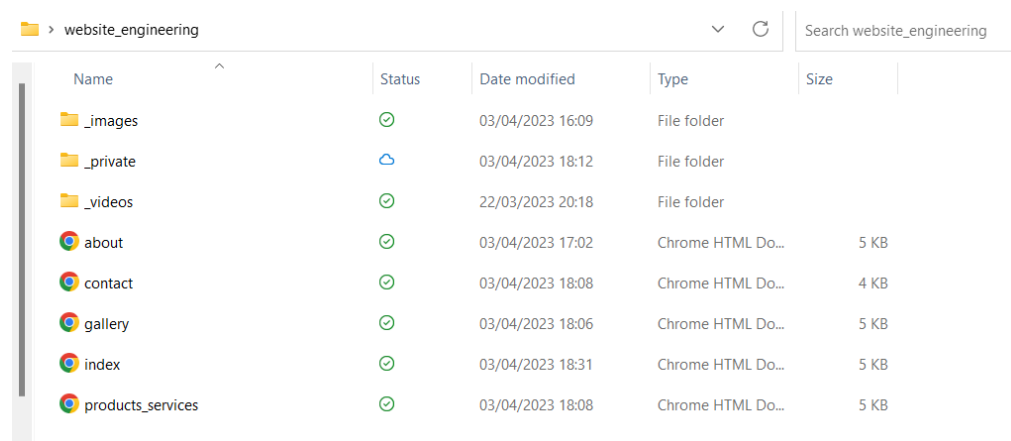- Trading Hours

Website Content Layout

Sitemap

Homepage:
- Logo at top corner
- Company Name
- Goal/Motto
- Navigation Panel (About, Products and Service,
- Gallery, Location)
- Photos (workshop and work equipment)
- A Gimps of what is on the other pages
- Copyrights at bottom

About Page
- Logo at top corner
- Navigation Menu (Homepage, gallery, and contact us)
- Paragraph about company (goals, visions, environment)
- Copyrights at bottom

Products and services
- Logo at the top corner
- Navigation menu(homepage, gallery and contact us)
- Products listed with pictures
- Services listed
- copyrights at bottom of page

Gallery
- Logo at top corner
- Navigation menu
- Categories for photos and videos
- photos of previous jobs with name and description
- Videos of manufactured goods working
- Copyright at bottom

About us
- Logo
- Navigation menu
- contact details
- Location
- copyrights

Figure 1: Done on LucidChart

PART 2

Improvement to Part 1
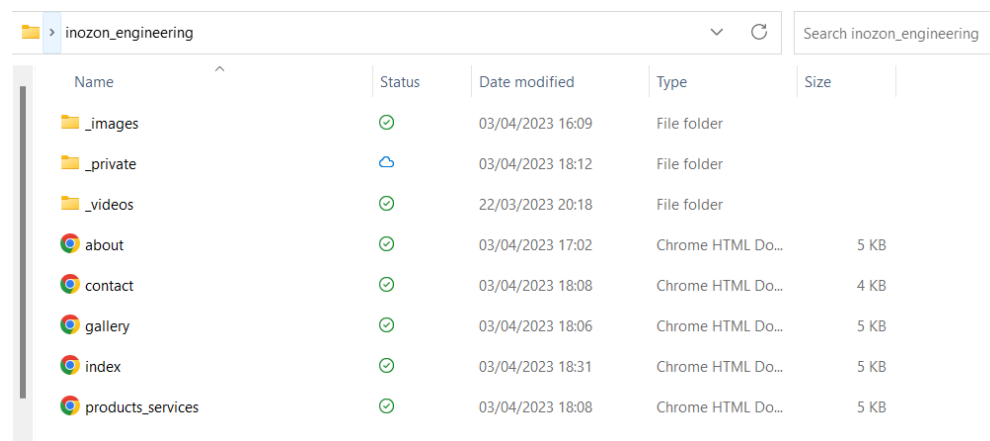
Improvement 1

I have changed the root folder name from website_engineering to inozon_engineering.

Figure 2: Root Folder title before changes

Figure 3: Root folder after changes

Improvement 2

There was an issue regarding my tags in the nav for both the header and footer. There was inline styling for each link in the header. These links where "text-decoration". Due to the navigation menu being the same throughout all the pages and headers and footers. Changes have been made to all navigations tags on all pages. The styling has been removed.

The alignment of my <li> tag in the header and footer for the last menu heading of "Contacts" was out of place. The tag has been realigned with the other tags.

```html
<body>
    <header>
        <p> +27 82 820 9546 | +27 82 820 9546 | <a href = "mailto: innocent@inozon.co.za">innocent@in
        <a href = "index.html">
        <img src = "_images/logo.jpg" height = "100" >
        </a>
        <h1>InoZon Engineering</h1>
            <nav>
                <ul>
                    <li class = "current">Home</li>

                    <li>
                        <a style = "text-decoration: none;" href = "about.html" >
                        <b>About</b></a>
                    </li>

                    <li>
                        <a style = "text-decoration: none;" href = "products_services.html" >
                        <b> Products & Services </b></a>
                    </li>

                    <li>
                        <a style = "text-decoration: none;" href = "gallery.html">
                        <b>Gallery</b></a>
                    </li>

                <li>
                        <a style = "text-decoration: none;" href = "contact.html">
                        <b> Contact Us </b></a>
                    </li>
                </ul>
            </nav>
    </header>
```

Figure 4: Nav before styling and tag changes

```
<body>
    <header>
        <p> +27 82 820 9546 | +27 82 820 9546 | <a href = "mailto: innocent@inozon.co.za">innocent@in
        <a href = "index.html">
        <img src = "_images/logo.jpg" height = "100" >
        </a>
        <h1>InoZon Engineering</h1>
            <nav>
                <ul>
                    <li class = "current">Home</li>

                    <li>
                        <a href = "about.html" > About</a>
                    </li>

                    <li>
                        <a href = "products_services.html" > Products & Services </a>
                    </li>

                    <li>
                        <a href = "gallery.html"> Gallery</a>
                    </li>

                    <li>
                        <a href = "contact.html"> Contact Us</a>
                    </li>
                </ul>
            </nav>
    </header>
```

Figure 5: Nav after syling and tag changes

Improvement 3

There was an issue regarding spacing in the document. It seemed that there was either too much space between the tags and content or no spacing at all making it difficult to read. This problem was throughout the entire document and its pages. Changes have been made throughout the entire document with regards to spacing. Redundant spaces have been removed and fixed, and the styling for the <li> tags has been changed to the same formatting shown in the feedback document

"**
<a>
**". Snippets are provided below to show some of the spacing and listing changes that were made.

```html
<footer>
    <nav>
        <ul>
            <li class = "current">Home</li>
            <li><a href = "about.html" > About</a></li>
            <li><a href = "products_services.html" > Products & Services </a></li>
            <li> <a href = "gallery.html"> Gallery</a></li>
            <li></li><a href = "contact.html"> Contact Us</a></li>
        </ul>
    </nav>

    <p>
        &copy; InoZon Engineering (Pty) Ltd 2023
    </p>
```

Figure 6: Snippet of list item restructured from the header index page.

```html
48      <!--All images were taken from Google Images-->
49          <ul>
50              <li>Gears:</li>
51              <ol>
52                  <li> Spur Gears</li>
53                  <img src = "_images/spur_gears.png" height = "200">
54                  <li> Helical Gears </li>
55                  <img src = "_images/helical_gear.jpg" height = "200">
56                  <li> Bevel Gears </li>
57                  <img src = "_images/bevel_gear.png" height = "200">
58              </ol>
59              <li> Internal Splines </li>
60              <img src = "_images/internal_spline2.jpg" height = "200">
61              <li> Keyways </li>
62              <img src = "_images/keyway.jpg" height = "200">
63              <li> Water pumps for Mining industry</li>
64              <img src = "_images/water_pump.png" height = "200">
65
66
67          </ul>
68
```

Figure 7: Redundant spaces snippet from products and services page.

```
<ul>
    <li>Gears:</li>
    <ol>
        <li> Spur Gears</li>
        <img src = "_images/spur_gears.png" height = "200">
        <li> Helical Gears </li>
        <img src = "_images/helical_gear.jpg" height = "200">
        <li> Bevel Gears </li>
        <img src = "_images/bevel_gear.png" height = "200">
    </ol>
    <li> Internal Splines </li>
    <img src = "_images/internal_spline2.jpg" height = "200">
    <li> Keyways </li>
    <img src = "_images/keyway.jpg" height = "200">
    <li> Water pumps for Mining industry</li>
    <img src = "_images/water_pump.png" height = "200">
</ul>

<div id = "Repair Services" name = "Repair Services"><h1>Repair Services</h1></div>
        <p> Repair gearboxes </p>
        <img src = "_images/repair_symbol2.png" height = "200">

<div id = "Services" name = "Services"><h1> Services</h1></div>
```

Figure 8: Redundant spacing removed from products and services page

```
        <hr><!--The line going along the page-->
    <h1>Products</h1>
    <!--All images were taken from Google Images-->
        <ul>
            <li>Gears:</li>
            <ol>
                <li> Spur Gears</li>
                <img src = "_images/spur_gears.png" height = "200">
                <li> Helical Gears </li>
                <img src = "_images/helical_gear.jpg" height = "200">
                <li> Bevel Gears </li>
                <img src = "_images/bevel_gear.png" height = "200">
            </ol>
            <li> Internal Splines </li>
            <img src = "_images/internal_spline2.jpg" height = "200">
            <li> Keyways </li>
            <img src = "_images/keyway.jpg" height = "200">
            <li> Water pumps for Mining industry</li>
            <img src = "_images/water_pump.png" height = "200">
        </ul>
```

Figure 9: Difficult to read (products and services page)

```
47        <h1>Products</h1>
48      <!--All images were taken from Google Images-->
49        <ul>
50            <li>Gears:</li>
51            <ol>
52                <li> Spur Gears</li>
53                <img src = "_images/spur_gears.png" height = "200">
54
55                <li> Helical Gears </li>
56                <img src = "_images/helical_gear.jpg" height = "200">
57
58                <li> Bevel Gears </li>
59                <img src = "_images/bevel_gear.png" height = "200">
60            </ol>
61            <li> Internal Splines </li>
62            <img src = "_images/internal_spline2.jpg" height = "200">
63
64            <li> Keyways </li>
65            <img src = "_images/keyway.jpg" height = "200">
66
67            <li> Water pumps for Mining industry</li>
68            <img src = "_images/water_pump.png" height = "200">
69        </ul>
```

Figure 10: Readable from products and services page

PART 3

Improvements to Part 2

- An issue within my project was that my content started at the edge of the page. To eliminate this I adding margin and padding spacing in my css code.

```css
style.css > ⅗ nav
1    *{
2        margin-left: 10;
3        margin-right: 10;
4        padding: 10;
5        box-sizing: border-box;
6        font-family: 'Titillium Web', sans-serif;
7    }
8
```

- Images were previously not centred on the page. CSS code has been added to centre images

```css
240    #col1, #col2, #col3{
241        text-align: center;
242        align-items: center;
243        display:inline-table;
244        margin-left: 50px;
245        margin-right: 50px;
246        width: 300px;
247        text-align: center;
248    }
249
```

- Due to the html form being placed on the contact us page for enquiries, I did not add a Google Form to the contact page. The only google form I added and centred was the newsletter form on the homepage.

```html
116    <h4>
117        Newsletter Subscription
118        <div>
119            <iframe src="https://docs.google.com/forms/d/e/1FAIpQLSdqZHYQzcT5ELx152Jz9kDx8cK6je9UaahanuFjwP2BR8GPow/viewform?embedded=true" width="64
120        </div>
121    </h4>
```

Figure 11: Newsletter Code

Newsletter Subscription

Newsletter

Receive newsletters

rutmasango1@gmail.com Switch accounts

✉ Not shared

* Indicates required question

Would you like to receive newsletters? *

○ Yes

○ No

Next

Clear form

Never submit passwords through Google Forms.

Google Forms   This content is neither created nor endorsed by Google.

Figure 12: Newsletter display on Website

- The footer navigation had been set to display as flex. I have changed this my removing flex and placing inline-block level display instead.

```css
249    /* footor*/
250    footer
251    {
252        background-color: rgb(26, 59, 27);
253        text-align: center;
254        padding-top: 10px;
255        padding-bottom: 10px;
256    }
257
258    #bottom ul li{
259        list-style: none;
260        text-decoration: none;
261        color: #fff;
262        font-weight: bold;
263        justify-content: space-between;
264        padding-left: 5px;
265        padding-right: 5px;
266        display: inline-block;
267    }
268
269    #bottom ul li a:hover{
270        color: orangered;
271    }
272
273    #lasttab{
274        color: #fff;
275        margin-top: 5px;
276        display: inline-flex;
277    }
```

Functionality

The functionality which I have added is a date stamp in the footer. This will allow the current year to show at the bottom of the page. The full date in which the website was last modified is within the code will also be displayed.
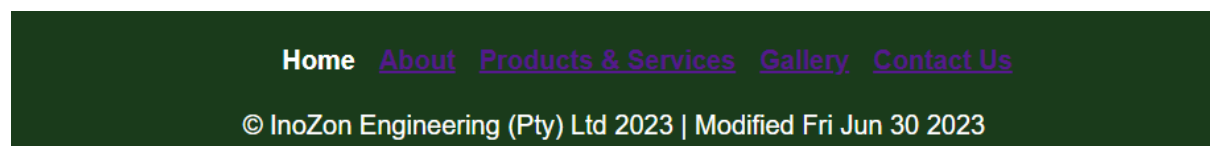
How this was achieved was first by imbedding JavaScript. This is done with the <script> tags. After that I declared to variables within there opening and closing tag of <script>. The two variables are theDate and theModificationDate. Once the two date variables are created, functions are used with the variables. For Year I used the .getFullYear function and for modified date I used the .toDateString function. I used document.write to display the result of those functions with extra text.

```
123
124       <footer>
125
126            <div id = "bottom">
127                <ul>
128                    <li class = "current">Home</li>
129                    <li><a href = "about.html" > About</a></li>
130                    <li><a href = "products_services.html" > Products & Services </a></li>
131                    <li> <a href = "gallery.html"> Gallery</a></li>
132                    <li><a href = "contact.html"> Contact Us</a></li>
133                </ul>
134            </div>
135
136         <div id="lasttab">
137             <p1>
138                 <script>
139                     var theDate = new Date()
140                     document.write("&copy; InoZon Engineering (Pty) Ltd " + theDate.getFullYear())
141                     document.write(" | Modified ")
142                     var theModifiedDate=new Date(document.lastModified)
143                     document.write(theModifiedDate.toDateString())
144
145                 </script>
```

Figure 13: JavaScript insert of Date stamp

Home About Products & Services Gallery Contact Us

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Search Engine Optimisation

The first thing that was done was to add in the description of what would show under the tittle of the website if it was to show as an result. Due to the title already being added there was no need for it to be entered again.

```
3   <head>
4       <meta charset="UTF-8">
5       <meta name= "description" content="Inozon Engineering (Pty) Ltd. is a recently launched mechanical engineering company specialising in precision machining
6       ">
7       <meta http-equiv="X-UA-Compatible" content="IE=edge">
8       <meta name="viewport" content="width=device-width, initial-scale=1.0">
9       <title>Inozon Engineering | Homepage</title>
0
```

The second step is to add the keywords so that search optimization is easier.

```
2   <html>
3   <head>
4       <meta charset="UTF-8">
5       <meta name= "description" content="Inozon Engineering (Pty) Ltd. is a recently launched mechanical engineering company specialisin
6       <meta name="keywords" content="engineering, mechanical engineering, food processing, mining parts, gears, spur gears, helical gear
7       <meta http-equiv="X-UA-Compatible" content="IE=edge">
8       <meta name="viewport" content="width=device-width, initial-scale=1.0">
9       <title>Inozon Engineering | Homepage</title>
```

The next step is to create a revisit meta tag so that the index of my website can be revisited after a certain number of days.

```
<head>
    <meta charset="UTF-8">
    <meta name= "description" content="Inozon Engineering (Pty) Ltd. is a recen
    <meta name="keywords" content="engineering, mechanical engineering, food pr
    <meta name="revisit" content="30 days.">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Inozon Engineering | Homepage</title>
```

There could be instances where the domain name can change and there is need to have users redirected to the new domain. A meta tag has been added to ensure that this happens.

```
<head>
    <meta charset="UTF-8">
    <meta name= "description" content="Inozon Engineering (Pty) Ltd. is a recently l
    <meta name="keywords" content="engineering, mechanical engineering, food process
    <meta name="revisit" content="30 days.">
    <meta http-equiv="refresh" content="30">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Inozon Engineering | Homepage</title>
```

Figure 14: Date stamp output

References

Motions, G., 2023. *Ground Gears.* [Online]
Available at: https://gearmotions.com/capabilities/helical-gears/
[Accessed 2023 April 3].