

IT PROJECT 700



IMPLEMENTATION PHASE

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1) Introduction

This implementation phase of the my construction company's website marks the transition from planning and design to building and launching a fully functional, user-friendly platform. This phase is dedicated to turning design concepts and technical requirements into a working website that effectively communicates the company's expertise, showcases past projects, and provides a seamless way for potential clients to inquire about services.

Through frontend and backend development, I will bring together key components—such as an engaging homepage, detailed service descriptions, a portfolio of completed projects, and a contact form optimized for lead generation. Using responsive design principles, the website will be developed to perform well across all devices, ensuring that users on mobile, tablet, and desktop can easily explore services and view project examples.

By integrating backend functionalities, we'll ensure that the site remains secure, efficient, and ready to scale as the company grows. With quality assurance and testing, we'll verify that every component works as intended, from contact forms to navigation, building a robust foundation for launching a polished, professional online presence for the construction company.

This intro can lead directly into more detailed steps for frontend, backend, and testing, giving context to each part of the implementation process.

2) Coding

Login HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Login Page</title>
<link rel="stylesheet"
href="../stylesheet/loginStyle.css">
</head>
<body background="">
<div class="login-container">
<h2>Login</h2>
<form id="loginForm" onsubmit="return validateForm()">
<div class="form-group">
<label for="username">Username:</label>
<input type="text" id="username" name="username"
required>
</div>
<div class="form-group">
<label for="password">Password:</label>
<input type="password" id="password" name="password"
required>
</div>
<button type="submit">Login</button>
<p id="error-message"></p>
</form>
</div>

<script src="LoginScript.js"></script>
</body>
</html>
```

Login Script

```
function validateForm() {  
  const username =  
    document.getElementById('username').value;  
  const password =  
    document.getElementById('password').value;  
  const errorMessage = document.getElementById('error-  
message');  
  
  // Simple validation check (you can add your own logic  
  here)  
  if (username === 'admin' && password === '12345') {  
    alert('Login successful!');  
    errorMessage.textContent = 'Login Successful';  
    return true; // allow form submission  
  } else {  
    errorMessage.textContent = 'Invalid username or  
password!';  
    return false; // prevent form submission  
  }  
}
```

Login CSS

```
label {  
  display: block;  
  font-size: 14px;  
  margin-bottom: 5px;  
}  
  
input[type="text"],  
input[type="password"] {  
  width: 40%;  
  padding: 15px;  
  border: 1px solid #ccc;
```

```
border-radius: 4px;  
}
```

```
button {  
width: 10%;  
padding: 20px;  
border: none;  
border-radius: 4px;  
background-color: #5cb85c;  
color: white;  
font-size: 16px;  
cursor: pointer;  
margin-top: 10px;  
margin-left: 200px;  
}
```

```
button:hover {  
background-color: #4cae4c;  
}
```

```
#error-message {  
color: red;  
font-size: 14px;  
margin-top: 10px;  
}
```

```
form{  
margin-left: 200px;  
}
```

```
* {  
margin: 10;  
padding: 10;  
box-sizing: border-box;  
font-family: "Poppins", sans-serif;  
}  
body {  
background-image: url("../images/img.jpg");  
}
```

```
.content {
max-width: 500px;
margin: auto;
padding: 100px;
}
h2{margin-left: 400px;}
```

Index HTML

```
<html lang="en">

<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Paintiles Construction</title>
<link rel="preconnect"
href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com"
crossorigin>
<link
href="https://fonts.googleapis.com/css2?family=Roboto+Mono:ital,wght@0,100..700;1,100..700&family=SUSE:wght@100..800&display=swap"
rel="stylesheet">
<link rel="stylesheet" href="../stylesheet/style.css">
<link rel="stylesheet" href="../stylesheet/slide.css">
```

```
</head>
```

```
<body>
```

```
<div class="Header">
<div class="Logo-Div"></div>
<div class="Car-Div"></div>
```

```
<div class="nhbrc"></div>
<div class="Car1-Div"></div>
<div class="Search"><input type="text" class="Search-
Input" placeholder="Quick Search">
<button class="search-button">Search</button>
</div>
```

```
</div>
<div class="Below-Header">
<a href="../ui/index.html" class="Home-button"> Home</a>
<a href="../ui/about.html" class="Home-button"> About
Us</a>
<a href="../ui/services.html" class="Home-
button">Services</a>
<a href="../ui/online.html" class="Home-button">Online
Quotation</a>
<a href="../ui/contact.html" class="Home-button"> Contact
Us</a>
```

```
</div>
```

```
<!-- Slideshow container -->
<div class="slideshow-container">
```

```
<!-- Full-width images with number and caption text -->
<div class="mySlides fade">
<div class="numbertext">1 / 5</div>

<div class="text">House Projects</div>
</div>
```

```
<div class="mySlides fade">
<div class="numbertext">2 / 5</div>

```



```
<div class="text">Bathroom Renovations</div>
</div>
```

```
<div class="mySlides fade">
<div class="numbertext">3 / 5</div>

<div class="text">Basins Tops & All other Tops</div>
</div>
<div class="mySlides fade">
<div class="numbertext">4 / 5</div>

<div class="text">School Projects</div>
</div>
<div class="mySlides fade">
<div class="numbertext">5 / 5</div>

<div class="text">Kitchen & TV Stands</div>
</div>
```

```
<!-- Next and previous buttons -->
<a class="prev" onclick="plusSlides(-1)">&#10094;</a>
<a class="next" onclick="plusSlides(1)">&#10095;</a>
</div>
<br>
```

```
<!-- The dots/circles -->
<div style="text-align:center">
<span class="dot" onclick="currentSlide(1)"></span>
<span class="dot" onclick="currentSlide(2)"></span>
<span class="dot" onclick="currentSlide(3)"></span>
<span class="dot" onclick="currentSlide(4)"></span>
<span class="dot" onclick="currentSlide(5)"></span>
</div>
```

```
<div class="intro">
<div class="intro-heading">
```

```
<p class="welcome">Welcome To Paintiles Construction PTY LTD</p>
</div>
<div class="intro-box">
<div class="intro-text">
<P class="text-intro">In 2018, Paintiles Construction
which is a footprint in the
construction sector was created with the aim to improve
both private and public sector.
To further advance its massive contribution
to the Southern African civil engineering and
infrastructure development,
as well as the aspirations of the Southern Africa region.
Paintiles Construction is 100% black owned
with the
aim to assist in eradication of poverty and also help
with skill transference in the construction sector.
```

Since its establishment, Paintiles Construction has been in the fore front in the home improvements and have been able to provide services such as Tilling, Painting, Plumbing, Roofing, Kitchen Units, Kitchen Tops, laminated Flooring, Built in-Cupboards and Ceilings. The success of Paintiles Construction (Pty) Ltd is an indication on the level of confidence South Africa has placed on Paintiles Construction (Pty) Ltd technical expertise, safety and quality standards in construction and infrastructure management of projects.

Building your home can be one of the most stressful yet satisfying projects to undertake.

And likely your single biggest financial investment. With over 5 years in construction, we know the tricks of the trade and will walk you through the process. From foundations to occupation and everything in-between. We manage each stage of the build; from site establishment to wet-works and finishes.</P></div><div class="intro-image"> </div></div></div>

```
<div class="footer">
<div class="logo-div2"></div>
<div class="address">
<div class=""> </div>
<div class="address-t">
<p class="address-text"> 4846 Maduna Drive </p>
<p class="address-text"> Phomolong </p>
<p class="address-text"> Tembisa </p>
<p class="address-text"> 1632 </p>
</div>
</div>
<div class="contact">
<div></div>
<div class="contact-us">
<p class="contact-t">069 309 5647</p>
</div>
</div>
<div class="whatsapp">
```

```
<div class="whatsapp-div"> </div>  
<div>  
<p class="call-w">068 534 9422</p>  
<p class="call-w1">069 309 5647</p>  
</div>  
</div>
```

```
<div class="email">  
<div class="email-div"></div>  
<div class="email-text-div">  
<p class="email-text">trechel.mabunda@gmail.com</p>  
</div>  
</div>
```

```
<div class="reviews">  
<div></div>  
<div><a href="https://www.bark.com/en/za/b/paintiles-  
construction/En70G/?show_reviews=true"  
class="review-text">  
Read Bark Reviews</a></div>  
</div>  
</div>
```

```
<script>let slideIndex = 0;  
showSlides();
```

```
function showSlides() {  
  let i;  
  let slides = document.getElementsByClassName("mySlides");  
  for (i = 0; i < slides.length; i++) {  
    slides[i].style.display = "none";  
  }  
  slideIndex++;  
  if (slideIndex > slides.length) { slideIndex = 1 }  
  slides[slideIndex - 1].style.display = "block";
```

```
setTimeout(showSlides, 3500); // Change image every 2
seconds
}</script>
```

```
</body>
```

```
</html>
```

About HTML

```
<html lang="en">

<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>About Us</title>
<link rel="stylesheet" href="../stylesheet/style.css">
<link rel="stylesheet" href="../stylesheet/about.css">
<link rel="preconnect"
href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com"
crossorigin>
<link
href="https://fonts.googleapis.com/css2?family=Roboto+Mono:ital,wght@0,100..700;1,100..700&family=SUSE:wght@100..800&display=swap"
rel="stylesheet">
</head>
```

```
<body>
<div class="Header">
<div class="Logo-Div"></div>
<div class="Car-Div"></div>
<div class="nhbrc"></div>
<div class="Car1-Div"></div>
```

```
<div class="Search"><input type="text" class="Search-Input" placeholder="Quick Search">
<button class="search-button">Search</button>
</div>
```

```
</div>
<div class="Below-Header">
<a href="../ui/index.html" class="Home-button"> Home</a>
<a href="../ui/about.html" class="Home-button"> About
Us</a>
<a href="../ui/services.html" class="Home-
button">Services</a>
<a href="../ui/online.html" class="Home-button">Online
Quotation</a>
<a href="../ui/contact.html" class="Home-button"> Contact
Us</a>
```

```
</div>
```

```
<div class="the-house">
<div></div>
</div>
```

```
<div class="our-story">
<div class="empty"></div>
<div class="Story">
<p class="heading-story">Our Story</p>
<p class="about-us"> <b>Paintiles Construction Celebrates
over 5 Golden Years of Building Excellence!</b>
<br><br>
```

Paintiles Construction has been a cornerstone of innovation and quality in the construction industry. Founded in 2018 by visionary leader Trechel Mabunda, the company has flourished under the guidance of current Owner and President, Trechel Mabunda.

We have been able to renovate over 50 household in Gauteng Province alone.

A Legacy Built on Teamwork and Dedication

Our continued success is a testament to the unwavering commitment of our incredible team. We are proud to boast an enduring core of executive management, senior leaders, and passionate professionals who have dedicated themselves to building something truly special. Our team have experience over 10 years in construction industry. We seek to improve our services and keep up with the latest technology and innovations.

A Culture of Stability and Tenure

Paintiles Construction fosters a work environment that values stability and long-term commitment.

This is reflected in the impressive tenure of our team members. This level of experience and continuity is a

valuable asset to our company and our clients. We ensure that our customers are satisfied with our work and this has been evident with the reviews our customers have been able to leave behind on our<a

href="https://www.bark.com/en/za/b/paintiles-construction/En70G/?show_reviews=true"

class="bark">Bark App

</p>

</div>

<div class="empty"></div>

</div>

<div class="pics">

<div class="empty"></div>

```
<div class="pic">
<div class="pic-img-div"></div>
<div class="pic-text">
<p class="pic-text-p"> <b>Experience You Can Trust,
Delivered on Every Project</b> <br><br>
```

At Paintiles Construction, we understand that your project is more than just bricks and mortar. It's a vision, an investment, and a reflection of your dreams. That's why we place the most experienced construction professionals at the helm of every project we undertake. Paintiles Construction is registered with the NATIONAL HOME BUILDERS REGISTRATION COUNCIL (NHBRC)

We're not just building structures, we're building trust. For over 5 years, we've consistently delivered the best value in building services, and we're here to continue that legacy for you.

We are defined by our dedication to delivering on our promises. We manage timelines precisely and maintain seamless communication with our building partners and clients, ensuring impeccable results.

Discover why Paintiles Construction is the trusted name in construction, where quality craftsmanship meets unparalleled customer satisfaction.

</p>

</div>

</div>

<div class="empty"></div>

</div>

```
<div class="pic-mine">
<div class="empty"></div>
<div class="pic-text-mine">
```



```
<p class="pic-text-p"> <b>Meet The Founder</b> <br><br>
```

Trechel Mabunda was born and raised in Mpumalanga Province. He has studied Electrical Engineering at the University of Johannesburg Doorfontein Campus. He is currently busy with Bachelor of Science in Information Technology with Richfield Graduate Institute of Technology. Trechel mabunda has provided leadership and overall management control as the head of the Paintiles Construction Team and has been responsible for projects in the both private and public sectors.

Trechel Mabunda is involved in every Paintiles Construction project and maintains a hands-on involvement and responsibility for all construction operations through project completion.

He has over 5 years experience with Paintiles Construction and specializes in design-build projects.

The firm's resume of project, outstanding performance evaluations, and list of satisfied customers reflects his longstanding commitment to total customer satisfaction.

```
</p>
</div>
<div class="mine-img-div"></div>
<div class="empty"></div>
</div>
```

```
<div class="footer">
<div class="logo-div2"></div>
<div class="address">
<div class=""> </div>
<div class="address-t">
<p class="address-text"> 4846 Maduna Drive </p>
```

```

<p class="address-text"> Phomolong </p>
<p class="address-text"> Tembisa </p>
<p class="address-text"> 1632 </p>
</div>
</div>
<div class="contact">
<div></div>
<div class="contact-us">
<p class="contact-t">069 309 5647</p>
</div>
</div>
<div class="whatsapp">
<div class="whatsapp-div"> </div>
<div>
<p class="call-w">068 534 9422</p>
<p class="call-w1">069 309 5647</p>
</div>
</div>

```

```

<div class="email">
<div class="email-div"></div>
<div class="email-text-div">
<p class="email-text">trechel.mabunda@gmail.com</p>
</div>
</div>

```

```

<div class="reviews">
<div></div>
<div><a href="https://www.bark.com/en/za/b/paintiles-
construction/En70G/?show_reviews=true"
class="review-text"> Read Bark Reviews</a></div>
</div>
</div>

```

```
</body>
```

```
</html>
```

Online HTML

```
<html lang="en">

<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Online Quotation</title>
<link rel="preconnect"
href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com"
crossorigin>
<link
href="https://fonts.googleapis.com/css2?family=Roboto+Mono:ital,wght@0,100..700;1,100..700&family=SUSE:wght@100..800&display=swap"
rel="stylesheet">
<link rel="stylesheet" href="../stylesheet/style.css">
<link rel="stylesheet" href="../stylesheet/online.css">

</head>

<body>
```

```
<div class="Header">
<div class="Logo-Div"></div>
<div class="Car-Div"></div>
<div class="nhbrc"></div>
<div class="Car1-Div"></div>
```

```
<div class="Search"><input type="text" class="Search-Input" placeholder="Quick Search">
<button class="search-button">Search</button>
</div>
</div>
```

```
<div>
```

```
</div>
<div class="Below-Header">
<a href="../ui/index.html" class="Home-button"> Home</a>
<a href="../ui/about.html" class="Home-button"> About
Us</a>
<a href="../ui/services.html" class="Home-
button">Services</a>
<a href="../ui/online.html" class="Home-button">Online
Quotation</a>
<a href="../ui/contact.html" class="Home-button"> Contact
Us</a>
```

```
</div>
```

```
<div class="online-container">
<div class="div1">
<div class="online-text">
<div class="onlinetext-content">
<p class="text-heading">Free Estimate</p>
<p class="text-body"> Build costs can be daunting
regardless of the project size. Our quotes are
accurate and detailed,
breaking down all costs as well as potential costs one
can expect when building.
```

There are no hidden details.

Let us work with you to plan and find cost-effective solutions to complete your project.

Leave us your details, tell us a bit about your project and we will contact you shortly.

```
</p>
</div>
<div class="forms-container" id="form-container">
<h4 class="text-heading">Get In Touch</h4>
<div class="form-container">
<p class="result-message"></p>
<div class="input-field">
<label>First Name:</label>
<input type="text" class="form-field" name="FirstName"
placeholder="Enter your first name" />
</div>
<div class="input-field">
<label>Last Name:</label>
<input type="text" class="form-field" name="LastName"
placeholder="Enter your last name" />
</div>
<div class="input-field">
<label>Select Province:</label>
<select class="form-select" name="Province">
<optgroup>
<option value="">Select your province</option>
</optgroup>
</select>
</div>
<div class="input-field">
<label>Subject:</label>
<input type="text" class="form-field" name="LastName"
placeholder="Enter subject" />
</div>
<div class="input-field">
<label>Message:</label>
<textarea class="form-field" name="LastName"
```

```
placeholder="Tell us about what you need."></textarea>
</div>
<div class="form-button">
<div class="app-btn" onclick="submitForm()">
<span>Submit</span>
</div>
</div>
</div>
</div>
</div>
<div>
<p class="text-heading"> <span class="color-text">Step 1:
</span>Let's meet</p>
<p>Deciding to build is a long-term commitment and you
will be working with your builder for a good few
months. We encourage open
and honest communication from the start. Securing a
constructive working relationship for the
duration of the project and beyond.
We'd love the opportunity
to meet you and get into the details of your build. This
lets us customize our quote to your
specific requirements and budget.</p>
</div>
<div>
<p class="text-heading"><span class="color-text">Step 2:
</span>Quotation phase</p>
<p class="text-body">While compiling our quote, we
request costings from our preferred suppliers on
various elements.
Such as kitchens, windows, doors, roof trusses, slab
designs and so forth. Depending on project
size,
the process for completing a thorough quote varies from 7
– 10 working days.

During this time we encourage you to familiarize yourself
with the construction process.</p>
</div>
```

```
</div>
```

```
<div class="forms-container free-estimate-form" id="form-
container">
<h4>Get Free Estimate Below</h4>
<div class="form-container">
<p class="results-message"></p>
<div class="input-field">
<label>First Name:</label>
<input type="text" class="form-field" name="firstName"
placeholder="Enter your first name" />
</div>
<div class="input-field">
<label>Last Name:</label>
<input type="text" class="form-field" name="lastName"
placeholder="Enter your last name" />
</div>
<div class="input-field">
<label>Select Service:</label>
<select onchange="handleServiceType(event)" class="form-
select" name="service">
<optgroup>
<option value="">Select required service</option>
</optgroup>
</select>
</div>
```

```
<div class="services-content">
<div class="areas-content">
<div class="input-field">
<label>Areas</label>
<select onchange="handleServiceArea(event)" class="form-
select" name="areas">
<optgroup>
<option value="">Area</option>
</optgroup>
</select>
</div>
```

```
</div>
<div class="types-content">
<div class="input-field">
<label>Types</label>
<select class="form-select" name="types">
<optgroup>
<option value="">Type</option>
</optgroup>
</select>
</div>
</div>
<div class="dimensions">
<div class="input-field">
<label>Total Square Meters</label>
<input type="number" class="form-field"
placeholder="Enter the dimensions"
name="totalSquareMeters" />
</div>
</div>
</div>
```

```
<div class="form-button">
<div class="app-btn" onclick="getQuotation()">
<span>Submit</span>
</div>
</div>
</div>
</div>
```

```
</div>
```

```
<div class="footer">
<div class="logo-div2"></div>
<div class="address">
```



```

<div class=""> </div>
<div class="address-t">
<p class="address-text"> 4846 Maduna Drive </p>
<p class="address-text"> Phomolong </p>
<p class="address-text"> Tembisa </p>
<p class="address-text"> 1632 </p>
</div>
</div>
<div class="contact">
<div></div>
<div class="contact-us">
<p class="contact-t">069 309 5647</p>
</div>
</div>
<div class="whatsapp">
<div class="whatsapp-div"> </div>
<div>
<p class="call-w">068 534 9422</p>
<p class="call-w1">069 309 5647</p>
</div>
</div>

```

```

<div class="email">
<div class="email-div"></div>
<div class="email-text-div">
<p class="email-text">trechel.mabunda@gmail.com</p>
</div>
</div>

```

```

<div class="reviews">
<div></div>
<div><a href="https://www.bark.com/en/za/b/paintiles-
construction/En70G/?show_reviews=true"

```

```
class="review-text"> Read Bark Reviews</a></div>
</div>
</div>
<script type="text/javascript"
src="../js/constants.js"></script>
<script type="text/javascript">
let currentService;
```

```
const selectFieldOptionsGroup =
document.querySelector(".input-field select > optgroup");
const selectServiceOptionsGroup =
document.querySelector(".free-estimate-form .input-field
select > optgroup");
```

```
const servicesNames = Services.map((service) => { return
service.name });
```

```
buildSelectOptions(Provinces, selectFieldOptionsGroup);
buildSelectOptions(servicesNames,
selectServiceOptionsGroup);
```

```
function submitForm() {
const formFields =
Array.from(document.querySelectorAll(".form-container
input, .form-container select, .form-container
textarea"));
const emptyFields = formFields.filter((item) => { return
(item.value == "") });
```

```
if (emptyFields.length > 0)
handleValidation(false, emptyFields);
else
handleValidation(true, formFields);
}
```

```
function handleServiceType(event) {
const selectedService = event.target.value;
```

```
currentService = selectedService;
```

```
document.querySelector(".dimensions").style.display =
"block";
document.querySelector(".areas-content").style.display =
"block";
document.querySelector(".types-content").style.display =
"block";
```

```
const serviceAreasGroupOptions =
document.querySelector(".areas-content select >
optgroup");
const serviceTypesGroupOptions =
document.querySelector(".types-content select >
optgroup");
```

```
serviceAreasGroupOptions.innerHTML = "";
serviceTypesGroupOptions.innerHTML = "";
```

```
let list = Services.filter((service => {
return (service.name == selectedService);
}));
```

```
buildSelectOptions(list[0].areas,
serviceAreasGroupOptions);
buildSelectOptions(list[0].types,
serviceTypesGroupOptions);
```

```
}
```

```
function handleServiceArea(event) {
const selectedSType = event.target.value;
const serviceTypesGroupOptions =
document.querySelector(".types-content select >
optgroup");
```

```
serviceTypesGroupOptions.innerHTML = "";
```

```
document.querySelector(".dimensions").style.display =
"block";
document.querySelector(".types-content").style.display =
"block";
```

```
let servicesTypes = Services.filter((service => {
```

```
return (service.name == currentService);
}));
```

```
servicesTypes = servicesTypes[0].types;
```

```
buildSelectOptions(servicesTypes,  
serviceTypesGroupOptions);
```

```
}
```

```
function handleValidation(status, formFields) {  
document.querySelector(".result-message").textContent =  
status ? "" : "Please fill in all required fields";
```

```
formFields.forEach((field) => {  
field.style.border = status ? "1px solid grey" : "1px  
solid red";  
});  
}
```

```
function buildSelectOptions(list, element) {  
list.forEach((item) => {  
const option = document.createElement("option");  
option.value = item;  
option.id = "option-item";  
option.textContent = item;
```

```
element.appendChild(option);  
});  
}
```

```
async function getQuotation() {  
const item = { totalSquareMeters: 0, firstName: "",  
lastName: "", service: "", types: "", areas: "" };  
const formFields =  
Array.from(document.querySelectorAll(".free-estimate-form  
input, .free-estimate-form select"));  
// const emptyFields = formFields.filter((item) =>  
{ return (item.value == "") });
```

```
formFields.forEach((field) => {  
item[field.name] = field.value;
```

```
});
```

```
if (item.firstName == "") {  
document.querySelector(".results-message").textContent =  
"Please enter your first name";  
return;  
}
```

```
if (item.lastName == "") {  
document.querySelector(".results-message").textContent =  
"Please enter your last name";  
return;  
}
```

```
if (item.service == "") {  
document.querySelector(".results-message").textContent =  
"Please select a service";  
return;  
}
```

```
if (item.areas == "") {  
document.querySelector(".results-message").textContent =  
"Please select a service area";  
return;  
}
```

```
if (item.types == "") {  
document.querySelector(".results-message").textContent =  
"Please select a service type";  
return;  
}
```

```
if (item.totalSquareMeters == "") {  
document.querySelector(".results-message").textContent =  
"Please enter the total square meters";  
return;  
}
```

```
const response = await
fetch("https://trechel.treasuremkhonto.co.za/api/quotatio
ns/getall", {
method: "POST",
body: JSON.stringify(item),
headers: { "Content-Type": "application/json", 'Access-
Control-Allow-Origin': '*' },
});
```

```
if (response.status)
document.querySelector(".results-message").textContent =
"Transaction successful.";
else
document.querySelector(".results-message").textContent =
"Transaction failed.";
```

```
}
</script>
```

```
</body>
```

```
</html>
```

Contact HTML

```
<html lang="en">

<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Contact Us</title>
<link rel="preconnect"
href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com"
crossorigin>
<link
href="https://fonts.googleapis.com/css2?family=Roboto+Mon
o:ital,wght@0,100..700;1,100..700&family=SUSE:wght@100..8
00&display=swap"
```

```
rel="stylesheet">
<link rel="stylesheet" href="../stylesheet/style.css">
<link rel="stylesheet" href="../stylesheet/contact.css">
```

```
</head>
```

```
<body>
```

```
<div class="Header">
<div class="Logo-Div"></div>
<div class="Car-Div"></div>
<div class="nhbrc"></div>
<div class="Car1-Div"></div>
<div class="Search"><input type="text" class="Search-
Input" placeholder="Quick Search">
<button class="search-button">Search</button>
</div>
```

```
</div>
<div class="Below-Header">
<a href="../ui/index.html" class="Home-button"> Home</a>
<a href="../ui/about.html" class="Home-button"> About
Us</a>
<a href="../ui/services.html" class="Home-
button">Services</a>
<a href="../ui/online.html" class="Home-button">Online
Quotation</a>
<a href="../ui/contact.html" class="Home-button"> Contact
Us</a>
```

```
</div>
```

```
<div class="contact-div">
<div class="empty"></div>
<div class="contact-div2">
```

```
<div class="map">
```

```
<div id="googleMap"  
style="width:400px;height:400px;"></div>
```

```
<script>  
function myMap() {  
var mapProp = {  
center: new google.maps.LatLng(51.508742, -0.120850),  
zoom: 5,  
};  
var map = new  
google.maps.Map(document.getElementById("googleMap"),  
mapProp);  
}  
</script>
```

```
<script  
src="https://maps.googleapis.com/maps/api/js?key=YOUR_KEY  
&callback=myMap"></script>  
<p>  
4846, Maduna Drive  
</p>  
<p>Phomolong</p>  
<p>Tembisa</p>  
<p>1632</p>
```

```
</div>  
<div class="map-form">
```

```
<form action="action_page.php">  
<div class="row">  
<div class="col-25">  
<label for="fname">First Name</label>  
</div>  
<div class="col-75">  
<input type="text" id="fname" name="firstname"  
placeholder="Your name..">  
</div>
```



```
</div>
<div class="row">
  <div class="col-25">
    <label for="lname">Last Name</label>
  </div>
  <div class="col-75">
    <input type="text" id="lname" name="lastname"
placeholder="Your last name..">
  </div>
</div>
<div class="row">
  <div class="col-25">
    <label for="country">Country</label>
  </div>
  <div class="col-75">
    <select id="country" name="country">
      <option value="australia">Australia</option>
      <option value="canada">Canada</option>
      <option value="usa">USA</option>
    </select>
  </div>
</div>
<div class="row">
  <div class="col-25">
    <label for="subject">Subject</label>
  </div>
  <div class="col-75">
    <textarea id="subject" name="subject" placeholder="Write
something.."
style="height:200px"></textarea>
  </div>
</div>
<div class="row">
  <input type="submit" value="Submit">
</div>
</form>
```

```
</div>
</div>
```

```
<div class="empty"></div>
</div>
```

```
<div class="footer">
<div class="logo-div2"></div>
<div class="address">
<div class=""> </div>
<div class="address-t">
<p class="address-text"> 4846 Maduna Drive </p>
<p class="address-text"> Phomolong </p>
<p class="address-text"> Tembisa </p>
<p class="address-text"> 1632 </p>
</div>
</div>
<div class="contact">
<div></div>
<div class="contact-us">
<p class="contact-t">069 309 5647</p>
</div>
</div>
<div class="whatsapp">
<div class="whatsapp-div"> </div>
<div>
<p class="call-w">068 534 9422</p>
<p class="call-w1">069 309 5647</p>
</div>
</div>
```

```
<div class="email">
<div class="email-div"></div>
<div class="email-text-div">
```

```
<p class="email-text"><a
href="mailto:trechel.mabunda@gmail.com">trechel.mabunda@g
mail.com</a></p>
</div>
</div>
```

```
<div class="reviews">
<div></div>
<div><a href="https://www.bark.com/en/za/b/paintiles-
construction/En70G/?show_reviews=true"
class="review-text"> Read Bark Reviews</a></div>
</div>
</div>
```

```
</body>
```

```
</html>
```

Services HTML

```
<html lang="en">

<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Services</title>
<link rel="preconnect"
href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com"
crossorigin>
<link
href="https://fonts.googleapis.com/css2?family=Roboto+Mon
o:ital,wght@0,100..700;1,100..700&family=SUSE:wght@100..8
00&display=swap"
rel="stylesheet">
```

```
<link rel="stylesheet" href="../stylesheet/style.css">
<link rel="stylesheet" href="../stylesheet/service.css">
</head>
```

```
<body>
<div class="Header">
<div class="Logo-Div"></div>
<div class="Car-Div"></div>
<div class="nhbrc"></div>
<div class="Car1-Div"></div>
<div class="Search"><input type="text" class="Search-
Input" placeholder="Quick Search">
<button class="search-button">Search</button>
</div>
```

```
</div>
<div class="Below-Header">
<a href="../ui/index.html" class="Home-button"> Home</a>
<a href="../ui/about.html" class="Home-button"> About
Us</a>
<a href="../ui/services.html" class="Home-
button">Services</a>
<a href="../ui/online.html" class="Home-button">Online
Quotation</a>
<a href="../ui/contact.html" class="Home-button"> Contact
Us</a>
```

```
</div>
```

```
<div class="our-services">
<div class="empty"></div>
<div class="services">
<h1 class="heading-s">Our Services</h1>
<p class="service-p">
```

Welcome to Paintiles Construction, your premier partner in construction solutions. We specialise in a diverse array of projects, from intricate bathroom renovations to expansive hard bricklaying and Boundary walls. No job is too big or too small for us – whether it's a swift window replacement or kitchen remoulding, we exceed expectations on every project.

At Paintiles Construction, we are defined by our dedication to delivering on our promises. We manage timelines precisely and maintain seamless communication with our building partners and clients, ensuring impeccable results. Discover why Paintiles Construction is the trusted name in construction, where quality craftsmanship meets unparalleled customer satisfaction. We are Construction professionals!!!

</div>

<div class="empty"></div>
</div>

<div class="products">
<div class="empty"></div>
<div class="Catalog">
<div class="catalog-text">
<p class="catalog-p"> Bathroom Remoulding & Tilling</p>
<p class="catalog-pp">We specialise in transforming your space with our comprehensive bathroom renovations, from simple bathroom repairs to full bathroom installations. Our expert team excels in custom builds, offering tailor-made solutions such as walk-in shower installations and custom vanity installations to suit your style. Enhance your home with new bathroom

```
additions or upgrade your space with premium bathroom
fittings. At Paintiles Construction, we are
committed to delivering high-quality craftsmanship and
exceptional service in every project.
Experience the difference with our bespoke bathroom
renovation services.</p>
</div>
</div>
<div class="catalog-img"> </div>
<div class="empty"></div>
</div>
```

```
<div class="products-2">
<div class="empty"></div>
<div class="Catalog-2">
<div class="catalog-img-2"> 
</div>
<div class="catalog-text-2">
```

```
<p class="catalog-p-2"> New Kitchen & Renovations</p>
<p class="catalog-pp-2">We bring your dream kitchen to
life with our expert kitchen renovations. We
cater to all needs,
from flat-pack and kit-set kitchen installations to
bespoke kitchen designs. Our services include
kitchen sink installations,
elegant splashback installations, and robust benchtop
installations, ensuring every detail is
perfect. Our skilled craftsmen
specialise in custom cabinetry installations, creating a
truly custom made kitchen that fits your
lifestyle. With high-quality
kitchen fittings and attention to detail, Paintiles
Construction transforms your kitchen into a
functional and beautiful space.
```

```
Trust us for unparalleled craftsmanship and personalised
kitchen
renovation services.</p>
</div>
</div>
```

```
<div class="empty"></div>
```

```
</div>
```

```
<div class="products">
<div class="empty"></div>
<div class="Catalog">
<div class="catalog-text">
<p class="catalog-p"> Renovations & Alterations.
</p>
<p class="catalog-pp">Modernise, upgrade or improve the
design of your house to make it a home.
As well as adding life and protecting your investment,
you'll be adding value to your most important
asset with the right renovations.
Use the space you already have more efficiently or in a
way that suits the changing needs of you and
your family with key alterations
that maximise your footprint. Let us run our experienced
eye over your ideas and we will help you
make the right decisions – our aim is to
inform you of the best options available to you. Get more
space and add value to your home with an
addition, whether it's a building that's
separate or attached to your existing structure. We enjoy
the challenge of making additions look,
function and feel like they were always
there.</p>
</div>
</div>
<div class="catalog-img"> 
```

```
</div>
<div class="empty"></div>
</div>
```

```
<div class="products-2">
<div class="empty"></div>
<div class="Catalog-2">
<div class="catalog-img-2"> 
</div>
<div class="catalog-text-2">
```

```
<p class="catalog-p-2"> Interior Painting & Exterior
Painting</p>
<p class="catalog-pp-2">Studies have shown that painting
the exterior of a house and the interior walls
and trim increases
the overall value of your property. It helps with resale,
as well, by adding a fresh look outside
and inside.
A fresh coat of paint on the exterior of a home makes it
more attractive—called curb appeal.
You and your family can have healthier indoor air by
painting interior walls and other surfaces with
zero-VOC or low VOC finishes and paints.
It will also reduce fumes and odors. Keeping a good coat
of quality paint on the exterior of the
home will help protect it from the weather,
particularly moisture from rain and snow. Painting
requires less money when compared to the cost of
repairing damage to your stucco, water intrusion repairs,
rot, and the possibility of mold. Extreme rot can even
diminish the structural integrity of your
home leading to further costly issues.
Painting the interior surfaces will help to resist wear
and tear and protect walls and trim from
moisture. Painting the walls is a simple and cost-
effective way
```



```
to protect your home from damage due to rot or even
mold.</p>
```

```
</div>
```

```
</div>
```

```
<div class="empty"></div>
```

```
</div>
```

```
<div class="products">
```

```
<div class="empty"></div>
```

```
<div class="Catalog">
```

```
<div class="catalog-text">
```

```
<p class="catalog-p"> Paving</p>
```

```
<p class="catalog-pp">Real Estate Agents confirm that a
paved driveway adds value to a home over a
standard concrete or asphalt driveway. Resistance to root
growth, erosion, earthquake and frost.
```

```
Pavers are designed to undulate with movement and will
not crack.
```

```
They allow for easy access to roots, making maintenance a
snap! In contrast to non-permeable
materials,
```

```
paving stones allow natural biological processes to
filter run-off before it pollutes our creeks.
```

```
The paving stones allow water to drain through, and
beneficial bacteria, which live between the
stones and in the gravel bed below,
remove toxins before they reach our creeks, the bay and
our beaches.</p>
```

```
</div>
```

```
</div>
```

```
<div class="catalog-img"> </div>
```

```
<div class="empty"></div>
```

```
</div>
```

```
<div class="products-2">
```

```
<div class="empty"></div>
```

```
<div class="Catalog-2">
<div class="catalog-img-2"> 
</div>
<div class="catalog-text-2">
```

```
<p class="catalog-p-2"> Stone Decorations</p>
<p class="catalog-pp-2"> Concrete paving slabs are one of
the most common parts of modern surroundings
nowadays.
From roads, and parks to driveways, these pavers exist
around us. Though other materials are also
available
for pavers concrete is the most popular material for
several reasons. Homeowners are very much
interested in
concrete paver patios to improve their outdoor living
spaces. Paver patios offer a stylish and
peaceful area that's perfect for
both alone time and hosting gatherings. They're made up
of individual concrete pavers that connect
to form a seamless surface.
Durability is the key feature of the concrete paving
slabs. These paving slabs are popular for their
exceptional durability.
Unlike other materials, they can withstand heavy loads
and adverse weather conditions. This makes
them suitable for driveway pavers,
Exterior slabs, and flooring. You don't have to have some
spare time for these slabs. Because low
maintenance is their significant advantage,
there shouldn't be any significant maintenance program
for them. Regular sweeping and occasional
washing keep these concrete look pavers looking new,
reducing the time and effort needed for upkeep. </p>
</div>
</div>
```

```
<div class="empty"></div>
```

```
</div>
```

```
<div class="products">
<div class="empty"></div>
<div class="Catalog">
<div class="catalog-text">
<p class="catalog-p"> Bricklaying & Plastering</p>
<p class="catalog-pp">Bricklayers and plasterers are
responsible for the building of the inner and outer
walls of a
building as well as the finishing of these structures.
Bricklayers construct and repair walls,
partitions, steps,
free standing piers, arches, fireplaces and other
structures made of brick, concrete block or
masonry materials.</p>
</div>
</div>
<div class="catalog-img"> </div>
<div class="empty"></div>
</div>
```

```
<div class="products-2">
<div class="empty"></div>
<div class="Catalog-2">
<div class="catalog-img-2"> 
</div>
<div class="catalog-text-2">
```

```
<p class="catalog-p-2"> Roof</p>
<p class="catalog-pp-2"> we specialise in reroofing
services that encompass everything from roof
replacement to roof repair and maintenance.
```

Whether your roof needs a complete overhaul or minor repairs, our experienced team ensures top-notch craftsmanship and attention to detail. We prioritise quality materials and efficient workmanship to enhance the longevity and durability of your roof. Trust Paintiles Construction to handle your reroofing needs with expertise and professionalism, ensuring your home or business remains protected and secure against the elements. Discover why we are the preferred choice for comprehensive roofing solutions.</p></div></div>

<div class="empty"></div>

</div>

```
<div class="footer">
<div class="logo-div2"></div>
<div class="address">
<div class=""> </div>
<div class="address-t">
<p class="address-text"> 4846 Maduna Drive </p>
<p class="address-text"> Phomolong </p>
<p class="address-text"> Tembisa </p>
<p class="address-text"> 1632 </p>
</div>
</div>
<div class="contact">
<div></div>
<div class="contact-us">
```

```
<p class="contact-t">069 309 5647</p>
</div>
</div>
<div class="whatsapp">
<div class="whatsapp-div"> </div>
<div>
<p class="call-w">068 534 9422</p>
<p class="call-w1">069 309 5647</p>
</div>
</div>
```

```
<div class="email">
<div class="email-div"></div>
<div class="email-text-div">
<p class="email-text">trechel.mabunda@gmail.com</p>
</div>
</div>
```

```
<div class="reviews">
<div></div>
<div><a href="https://www.bark.com/en/za/b/paintiles-
construction/En70G/?show_reviews=true"
class="review-text"> Read Bark Reviews</a></div>
</div>
</div>
</body>
```

```
</html>
```

Slide CSS

```
* {box-sizing:border-box}
```

```
/* Slideshow container */  
.slideshow-container {  
  max-width: 1000px;  
  position: relative;  
  margin: auto;  
  margin-top: 80px;  
}
```

```
/* Hide the images by default */  
.mySlides {  
  display: none;  
}
```

```
/* Next & previous buttons */  
.prev, .next {  
  cursor: pointer;  
  position: absolute;  
  top: 50%;  
  width: auto;  
  margin-top: -22px;  
  padding: 16px;  
  color: white;  
  font-weight: bold;  
  font-size: 18px;  
  transition: 0.6s ease;  
  border-radius: 0 3px 3px 0;  
  user-select: none;  
}
```

```
/* Position the "next button" to the right */  
.next {  
  right: 0;  
  border-radius: 3px 0 0 3px;  
}
```

```
/* On hover, add a black background color with a little  
bit see-through */  
.prev:hover, .next:hover {  
background-color: rgba(0,0,0,0.8);  
}
```

```
/* Caption text */  
.text {  
color: #f2f2f2;  
font-size: 15px;  
padding: 8px 12px;  
position: absolute;  
bottom: 8px;  
width: 100%;  
text-align: center;  
}
```

```
/* Number text (1/3 etc) */  
.numbertext {  
color: #f2f2f2;  
font-size: 12px;  
padding: 8px 12px;  
position: absolute;  
top: 0;  
}
```

```
/* The dots/bullets/indicators */  
.dot {  
cursor: pointer;  
height: 15px;  
width: 15px;  
margin: 0 2px;  
background-color: #bbb;  
border-radius: 50%;  
display: inline-block;  
transition: background-color 0.6s ease;  
}
```

```
.active, .dot:hover {  
background-color: #717171;
```

```
}
```

```
/* Fading animation */  
.fade {  
  animation-name: fade;  
  animation-duration: 1.5s;  
}
```

```
@keyframes fade {  
  from {opacity: .4}  
  to {opacity: 1}  
}
```

Stylesheet

```
body{  
  font-family: "Roboto Mono", Arial, Helvetica, sans-serif;  
  margin: 0;  
}  
  
.Header{  
  display: flex;  
  flex-direction: row;  
  justify-content: space-between;  
  align-items: center;  
  margin-left: 30px;  
}  
  
.Search-Input{  
  padding-right: 50px;  
  padding-left: 10px;  
  border-radius: 20px;  
  padding-top: 10px;  
  padding-bottom: 10px;  
  background-color: rgb(230, 198, 19);  
  border: none;  
  color: white;  
  margin-left: -20;  
}  
  
.Search-Input::placeholder{
```



```
margin-left: 20px;
color: white;
}
.search-button{
padding-top: 10px;
padding-bottom: 10px;
border-radius: 15px;
color: white;
background-color: rgb(230, 198, 19);
border: none;
}
.search-button:hover{
background-color: antiquewhite ;
color: burlywood;
cursor: pointer;
}
.Car-Div{
flex: 1;
margin-right: 0px;
}
.Car1-Div{
flex: 1;
margin-right: 0px;
```

```
}
.car-logo{
width: 50%;
}
.car-logo2{
width: 50%;
}
.Logo-Div{
flex: 1;
margin-right: 0px;
}
.nhbrc{
flex: 1;
margin-right: 0px;
}
```

```
.search{
flex: 1;
}
.logo{
width: 50%;
}
.nhbrc-logo{
width: 80%;
}
.Below-Header{
background-color: rgb(230, 198, 19);
display: flex;
flex-direction: row;
justify-content: center;
align-items: center;
padding-top: 0px;
padding-bottom: 40px;
padding-left: 10px;
padding-right: 10px;
}
.Below-Header a{
padding-top: 0px;
}
.Home-button{
background-color:rgb(230, 198, 19) ;
margin-right: 40px;
border:none;
padding-top: 0px;
padding-bottom: 5px;
padding-left: 3px;
padding-right: 3px;
color: white;
font-size: 15px;
text-decoration: none;
font-weight: bold;
}
```

```
.Home-button:hover{
background-color: antiquewhite;
```

```
color: burlywood;
cursor: pointer;
border: none;
border-radius: 5px;
}

.intro{
display: flex;
flex-direction: column;
margin-left: 170px;
margin-right: 170px;
margin-bottom: 60px;
}

.intro-heading{
flex: 1;
}

.intro-box{
flex: 1;
display: flex;
flex-direction: row;
justify-content: center;
align-items: center;
}

.intro-text{
flex: 1;
}

.intro-image{
width: 250px;
}

.mcc{
width: 100%;
border-radius: 0%;
}

.welcome{
background-color:rgb(230, 198, 19) ;
font-weight: bold;
font-size: larger;
text-align: center;
padding-top: 10px;
```

```
padding-bottom: 10px;
color: white;
}
.text-intro{
background-color: rgb(230, 198, 19);
color: white;
text-align: justify;
padding-left: 20px;
padding-right: 25px;
padding-top: 24px;
padding-bottom: 24px;
}
.footer{
margin: 0;
display: flex;
flex-direction: row;
background-color:rgb(11, 132, 136) ;
color: white;
}
.logo-div2{
margin-left: 10px;
width: 300px;
margin-right: 100px;
margin-top: 65px;
}
.logo2{
width: 100%;
}
.address{
width: 300px;
display: flex;
flex-direction: column;
margin-right: 0px;
}
.contact{
width: 300px;
display: flex;
flex-direction: column;
```

```
margin-right: 0px;
}
.whatsapp{
width: 350px;
display: flex;
flex-direction: column;
margin-right: -100px;
margin-top: 20px;
}
.reviews{
width: 300px;
display: flex;
flex-direction: column;
}
.address-a{
width: 50px;
margin-right: 10px;
margin-left: 45px;
margin-top: 20px;
}
.call-img{
width: 50px;
border-radius: 30px;
margin-right: 10px;
margin-top: 20px;
margin-left: 30px;}
.contact-t{
margin-top: 20px;
margin-left: 20px;
}
.whatsapp-div{
width: 50px;
}
.whatsapp-img{
width: 100%;
border-radius: 200px;
border: none;
margin-left: 35px;
```

```
}
```

```
.call-w{
margin-top: 18px;
margin-bottom: 0px;
}
.call-w1{
margin-top: 5px;
}
a{
font-weight: bold;
margin-top: 65px;
color: white;
}
.reviews-img{
width: 100px;
margin-left: 30px;
margin-top: 0;
margin-bottom: 0px;
height: 88px;
}
.review-text{
margin-top: 0px;
}
.email{
display: flex;
flex-direction: column;
margin-right: 30px;
}
.email-div{
width: 50px;
}
.email-img{
width: 100%;
border-radius: 200px;
border: none;
margin-top: 18px;
margin-left: 60px;
}
```

```
.email-text-div{  
flex: 1;  
margin-left: 0px;  
}
```

```
* {  
box-sizing: border-box;  
margin: 0;  
padding: 0;  
}
```

```
body {  
font-family: Arial, sans-serif;  
display: flex;  
justify-content: center;  
align-items: center;  
height: 100vh;  
background-color: #f2f2f2;  
}
```

```
.login-container {  
background-color: #fff;  
padding: 20px;  
border-radius: 5px;  
box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);  
width: 300px;  
text-align: center;  
}
```

```
h2 {  
margin-bottom: 20px;  
color: #333;  
}
```

```
.form-group {  
margin-bottom: 15px;  
}
```

Service CSS

```
.our-services{
display: flex;
flex-direction: row;
}
.services{
flex: 1;
}
.empty{
margin-left: 100px;
margin-right: 100px;
}
.heading-s{
text-align: center;
}
.service-p{
text-align: justify;
}
.products{
display: flex;
flex-direction: row;
margin-bottom: 30px;
}
.catalog{
flex: 1;
display: flex;
flex-direction: row;
}
.catalog-img{
margin-top: 80px;
width: 400px;
margin-left: 10px;
}
.catalog-text{
flex: 1;
}
```



```
.c-img{
width: 100%;
border-radius: 20px;
}
.catalog-p{
font-size: 30px;
font-weight: bold;
text-align: center;
}
.catalog-pp{
text-align: justify;
}
```

```
.products-2{
display: flex;
flex-direction: row;
margin-bottom: 30px;
margin-top: 50px;
}
.catalog-2{
flex: 1;
display: flex;
flex-direction: row;
}
.catalog-img-2{
margin-top: 80px;
width: 400px;
margin-right: 10px;
}
.catalog-text-2{
flex: 1;
}
.c-img-2{
width: 100%;
border-radius: 20px;
}
.catalog-p-2{
font-size: 30px;
font-weight: bold;
```

```
text-align: center;
}
.catalog-pp-2{
text-align: justify;
}
```

Online CSS

```
.online-container {
width: 80%;
margin: 0 auto;
}

.div1 {
display: flex;
flex-direction: column;
margin-right: 20px;
```

```
}
```

```
.div2 {
flex: 1;
display: flex;
flex-direction: column;
margin-left: 100px;
margin-top: 50px;
}
```

```
.text-heading {
font-weight: bold;
font-size: 30px;
}
```

```
.color-text {
color: rgb(230, 198, 19);
}
```

```
.form-1 {
margin-bottom: 20px;
```

```
}
```

```
.forms-container .form-container .input-field {  
display: grid;  
}
```

```
.form-container .input-field label {  
font-size: 13px;  
}
```

```
.form-container .input-field textarea,  
.form-container .input-field input,  
.form-container .input-field select {  
padding: 8px;  
margin: 5px 0 5px 0;  
border-radius: 5px;  
border: 1px solid grey;  
}
```

```
.app-btn {  
padding: 10px;  
background: rgb(230, 198, 19);  
width: 15%;  
text-align: center;  
margin: 10px 0 10px 0;  
box-shadow: 1px 1px 1px #333333;  
border-radius: 5px;  
cursor: pointer;  
}
```

```
.app-btn:hover {  
background-color: #333333;  
color: #ffffff;  
}
```

```
.results-message,  
.result-message {  
color: red;  
}
```

```
.online-container .a {  
color: red !important;  
text-decoration: none !important;  
}
```

```
.online-container a:hover {  
color: #000000 !important;  
text-decoration: underline !important;  
}
```

```
.forms-container,  
.onlinetext-content {  
width: 45%;  
}
```

```
.online-text {  
display: flex;  
justify-content: space-between;  
width: 100%;  
}
```

```
.areas-content,  
.types-content,  
.dimensions {  
display: none;  
}
```

Contact CSS

```
.contact-div{  
display: flex;  
flex-direction: row;  
margin-top: 80px;  
}  
.empty{  
margin-left: 100px;  
margin-right: 100px;  
}  
.contact-div2{
```

```
flex: 1;
display: flex;
flex-direction: row;
margin-bottom: 40px;
}
.map{
flex-direction: 1/2;
margin-right: 100px;
}
.map-form{
flex-direction: 1/2;
margin-left: 150px;
}
.form-div{
display: inline-block;
margin-bottom: 20px;
}
.input-div{
margin-bottom: 10px;
}
.text-area{
margin-bottom: 30px;
margin-top: 20px;
margin-left: 20px;
}
.submit-button{
margin-top: 10px;
}
}
```

About CSS

```
.house{
margin: 0px;
width: 100%;
}
the-house{
```

```
display: flex;
flex: row;
}

.our-story{
display: flex;
flex-direction: row;
```

```
}
.empty{
margin-left: 100px;
margin-right: 100px;
}
.story{
flex: 1;
}
.heading-story{
text-align: center;
font-weight: bold;
font-size: 40px;
font-family: "Roboto Mono", Arial, Helvetica, sans-serif;;
}
.about-us{
text-align: justify;
}
.bark {
color: black;
margin-left: 5px;
}
```

```
.pics{
display: flex;
flex-direction: row;
margin-top: 40px;
}
```

```
.pic{
display: flex;
flex-direction: row;
```

```
flex: 1;
}
.pic-img-div{
width: 400px;
}
.pic-img{
width: 100%;
border-radius: 10px;
border: none;
}
.pic-text{
flex: 1;
margin-left: 40px;
```

```
}
.pic-text-p{
margin-top: 0px;
text-align: justify;
}
.pic-mine{
margin-top: 30px;
display: flex;
flex-direction: row;
}
.pic-text-mine{
flex: 1;
}
.mine-img-div{
width: 200px;
}
.mine-img{
margin-left: 15px;
width: 100%;
border: none;
border-radius: 400px;
margin-top: 50px;
}
```

Script

```
const Provinces = ["Mpumalanga", "Gauteng", "Limpopo",  
"North West", "Western Cape", "Eastern Cape", "Northern  
Cape", "KZN", "Free State"];  
const Services = [{  
  name: "Tiling",  
  areas: ["Wall", "Floor"],  
  types: ["800 x 800mm", "600 x 1200mm", "600 x 600mm",  
"430 x 430mm", "350 x 350mm", "600 x 200mm", "450 x  
900mm"],  
  totalSquareMeters: 0  
}, {  
  name: "Paving",  
  areas: ["Commercial", "Residential"],  
  types: ["Concrete Paving", "Brick Paving", "Slate Paving",  
"Cobblestone Paving", "Travertine Paving"],  
  totalSquareMeters: 0  
}];
```

```
let slideIndex = 0;  
showSlides();  
  
function showSlides() {  
  let i;  
  let slides = document.getElementsByClassName("mySlides");  
  for (i = 0; i < slides.length; i++) {  
    slides[i].style.display = "none";  
  }  
  slideIndex++;  
  if (slideIndex > slides.length) { slideIndex = 1 }  
  slides[slideIndex - 1].style.display = "block";  
  setTimeout(showSlides, 8000); // Change image every 8  
  seconds  
}
```



```
const cors = require("cors");
const express = require("express");

const app = express();
```

```
app.use(cors());
app.use(express.json());
```

```
const quotationRouter =
require("./src/handlers/quotation");
```

```
app.use("/api/quotations", quotationRouter);
```

```
app.listen(5500);
```

Database Connection

```
const mysql = require("mysql2");
```

```
class DbContext {
constructor() { }
```

```
async createConnection() {
const pool = mysql.createPool({
user: "treasur2_trechel",
password: "82jvJpDa24JyeRvvu2vD",
host: "localhost",
database: "treasur2_trechel",
port: 3306,
multipleStatements: true
});
```

```
return pool;
}
```

```
async handleDBQueries(query, values) {
const pool = await this.createConnection();
```

```
return new Promise((resolve, reject) => {
pool.getConnection((error, connection) => {
```

```

if (error) {
  reject(error)
  pool.end();
} else {
  connection.query(query, values, (error, results) => {
    if (error) {
      reject(error);
      pool.end();
    } else {
      resolve(results);
      pool.end();
    }
  });
}
});
}
});
}
}
}
}

```

```

module.exports = DbContext;

```

3) Testing

On testing the following issues were looked at to see the full functionality of the app.

1. Cross-Browser Compatibility

- Problem: Different browsers (Chrome, Firefox, Safari, Edge, etc.) may interpret HTML, CSS, and JavaScript differently, leading to inconsistencies in layout, styling, and functionality.
- Solution: Cross-browser testing tools (e.g., BrowserStack, Sauce Labs) are used to test the application across multiple browsers to ensure a consistent experience.

2. Responsive Design and Cross-Device Testing

- Problem: Web applications need to function well on various devices (mobile, tablet, desktop) with different screen sizes and resolutions. Issues often arise with layout alignment, element sizing, and touch responsiveness.

- Solution: Responsive testing to verify that the application adapts gracefully across device types and resolutions.

3. Performance and Load Testing

- Problem: High user traffic or heavy data can slow down or crash a web application, especially when it's not optimized for scalability.
- Solution: Performance testing (e.g., with JMeter, LoadRunner) simulates user load to check for bottlenecks, identify resource-heavy processes, and improve response time.

4. Security Vulnerabilities

- Problem: Web applications are at risk of various security threats, such as SQL injection, Cross-Site Scripting (XSS), Cross-Site Request Forgery (CSRF), and data breaches.
- Solution: Security testing identifies vulnerabilities and ensures secure coding practices are followed.

5. API and Backend Integration Issues

- Problem: Many web applications rely on APIs for functionality, and issues with API responses, delays, or failures can break key features.
- Solution: API testing tools like Postman or SoapUI help test API responses and integrations, while mock servers can simulate server responses to identify issues early.

6. Database-Related Issues

- Problem: Problems related to data consistency, data integrity, and performance of database queries can impact the user experience and functionality.
- Solution: Testing for data accuracy, validating CRUD operations, and checking for potential bottlenecks in database transactions are essential to maintain integrity and performance.

7. Session Management and Authentication

- Problem: Incorrect session management can lead to issues like unauthorized access, session hijacking, and logout failures.
- Solution: Testing includes verifying session expiration, correct user role permissions, secure login/logout, and ensuring tokens are managed securely.

8. User Interface (UI) and User Experience (UX) Issues

- Problem: UI and UX issues may include broken links, unclickable buttons, alignment issues, confusing navigation, and accessibility problems that degrade the user experience.
- Solution: Functional and UI testing validate that all interactive elements work as expected. Accessibility testing ensures that users with disabilities can access and navigate the application.

9. Data Handling and Validation

- Problem: Improper data validation can lead to issues like incorrect data entry, data corruption, and application crashes.
- Solution: Testing data input fields, error messages, and data handling functions to ensure only valid data is accepted, sanitized, and processed.

10. Error Handling and Logging

- Problem: Poor error handling can leave users with generic error messages or no information on how to proceed when an issue occurs.
- Solution: Testing for proper error messages, logging of issues, and user-friendly error displays can improve transparency and support for debugging.

11. Localization and Internationalization

- Problem: For web applications intended for global audiences, localization (language, date formats, currencies) may not be handled correctly.
- Solution: Ensuring all text, formats, and other culturally specific elements are accurately represented and tested for different locales.

12. Concurrency and Race Conditions

- Problem: In multi-user environments, simultaneous actions can result in conflicts or errors due to race conditions.
- Solution: Concurrency testing can simulate multiple users accessing and modifying data to ensure data consistency and handle race conditions gracefully.

Addressing these core issues during the testing phase helps ensure the application is robust, secure, and provides a reliable experience for all users across devices and environments.

4) System Testing (Test Case, Evaluation of the testing results)

System testing is a comprehensive phase in the testing life cycle, focusing on evaluating the complete functionality of a web application as an integrated whole. It involves testing the application's end-to-end behavior, verifying that it meets functional and non-functional requirements, and ensuring that all components interact seamlessly.

Here's a breakdown of how system testing is conducted, including writing test cases and evaluating results in a web application context:

1. Test Case Design for System Testing

- Test cases in system testing should cover all features of the application, ensuring both expected functionality and edge cases.
- Each test case should have clear objectives, input data, expected outcomes, and pass/fail criteria.

Key Components of a Test Case:

- Test Case ID: Unique identifier for tracking.
- Test Title: Brief description of the test.
- Preconditions: Any setup or conditions required before the test begins.
- Test Steps: Detailed steps to execute the test.
- Expected Result: The anticipated outcome for each step.
- Actual Result: The actual outcome observed during testing.

- Status: Pass/Fail status based on the comparison between expected and actual results.

- Comments: Additional notes, issues encountered, or bugs reported.

2. Execution and Documentation of Results

During test execution, test cases are run according to the steps outlined. Each step's outcome is documented, and any deviations from the expected result are noted as potential defects.

- Pass: When the actual result matches the expected result for all steps in the test case.

- Fail: When the actual result does not match the expected result. Failing test cases are documented with detailed information, including observed behavior and logs for further analysis.

- Blocked: Sometimes, a test case cannot proceed due to unresolved dependencies or setup issues. These cases are marked as blocked.

3. Evaluation of Testing Results

After running the test cases, results are evaluated based on several factors to determine the quality and readiness of the web application.

Evaluation Criteria:

1. Defect Severity and Priority:

- Analyze defects based on their impact on the user experience and system functionality.

- Prioritize critical issues that could lead to major malfunctions, data loss, or security vulnerabilities.

2. Pass/Fail Rate:

- Review the pass/fail ratio of test cases to assess if the application meets the expected quality standards.

- A high pass rate indicates stability, while a high failure rate may indicate the need for additional bug fixes or refinements.

3. Defect Density:

- Measure the number of defects per module or function to identify high-risk areas within the application.

- Modules with high defect density may require focused testing or code improvements.

4. User Acceptance Testing (UAT) Criteria:

- For system testing to be successful, the application should meet predefined criteria for functionality, usability, and performance.

- UAT criteria can serve as a benchmark to determine if the application is ready for release.

5. Test Coverage Analysis:

- Review the percentage of functionalities, use cases, and code covered by system testing.
 - Ensure that critical and high-usage parts of the application have been thoroughly tested.
6. Regression Testing Results:
- If defects were identified and fixed, rerun system tests and additional regression tests to confirm that changes did not introduce new issues.
7. Performance and Security Validation:
- Evaluate the outcomes of performance and security tests, ensuring the application can handle the expected load and protect against vulnerabilities.

System testing is essential to ensure a web application operates correctly as an integrated system. Writing detailed test cases, executing them thoroughly, and evaluating results against defined criteria provide a structured approach to validating an application's functionality, usability, performance, and security before release.

Installation (Software Application Installation)

Here's a step-by-step process for launching my website using HostAfrica.

1. Plan and Prepare Website Content

- **Content Preparation:** All website content, including HTML/CSS files, images, databases, and any applications, are prepared and ready for deployment.
- **Website Structure:** I have Organized files and code properly, as this structure will be uploaded to the host server.

2. Choose a Domain Name and Register It

- **Domain Registration:** If you don't already have a domain, you can register one through HostAfrica or any domain registrar.
- **Connect Domain to Hosting:** If the domain is registered elsewhere, update the DNS settings to point to HostAfrica's name servers. HostAfrica will typically provide DNS server names, which should be updated in your domain registrar's settings.

3. Select a Hosting Plan on HostAfrica

- **Choose a Plan:** Visit HostAfrica's website and browse their hosting plans. For instance, options include shared hosting (suitable for personal sites or

small businesses), VPS (for more control and resources), or dedicated servers (for high-traffic sites).

- Set Up an Account: Register for an account on HostAfrica and select the hosting plan that suits your website's requirements.

4. Set Up Your Hosting Environment

- Log In to HostAfrica's Control Panel: Access HostAfrica's control panel, often called cPanel to manage my hosting.
- Create Databases: My website required a database (such as MySQL for WordPress), created the database and user credentials from the control panel.

5. Upload Your Website Files

- Using File Manager: From the control panel, access the File Manager. You can upload your files directly to the server here, within the public_html directory for primary domains.
- Using FTP/SFTP: Used an FTP client like FileZilla to upload files to the server. HostAfrica will provide FTP details, which you'll use to connect and upload content.

File Structure:

- Placed the website's files in the correct root folder (public_html for primary domains).
- Ensure all linked files (e.g., CSS, JavaScript, images) are in the correct directories to avoid broken links.

6. Test Your Website

- Previewed the Website: Before going live, i have previewed the website to ensure everything appears as expected.
- Cross-Browser and Device Testing: Verify that the website looks and functions properly across different browsers and devices (desktop, tablet, mobile).
- Error Handling: Check for missing files, broken links, or database connection issues. HostAfrica's control panel might also provide error logs to help identify issues.

7. Configure Website Security

- **SSL Certificate:** HostAfrica offer free SSL (like Let's Encrypt) or premium SSL options. Activate SSL to secure your website (making it accessible via https://).
- **Update Permissions:** Set appropriate file permissions for security. Publicly accessible files should have permission levels like 644 (for files) and 755 (for directories).
- **Backups:** Enable automatic backups if HostAfrica provides this service, or set up manual backups to ensure data safety.

8. Optimize Website Performance

- **Caching:** Use server or CMS-level caching to speed up the site. HostAfrica offer caching options in the control panel.
- **Compress Images:** Ensure images and other assets are optimized for the web to reduce load times.

9. Launch the Website

- **Final Check:** Revisited each page of my website to check for consistency, functionality, and usability.
- **Publicize the Domain:** Update any social media profiles, business directories, and marketing materials with your website's URL.
- **Monitor Post-Launch:** Use analytics tools like Google Analytics and monitoring tools like UptimeRobot to track site performance and uptime.

10. Ongoing Maintenance

- **Regular Updates:** Regularly update any CMS, plugins, or site dependencies.
- **Security Checks:** Periodically review security settings, monitor for vulnerabilities, and keep backups up-to-date.
- **User Feedback:** Gather user feedback to improve content, functionality, or design.