

Project 1 - Creation of Single Page Website

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Task:

Create a Single Page Portfolio Website

ABSTRACT:

This project showcases a responsive and visually neat single-page website for **TechFix**, a gadget repair service provider. The design focuses on creating a modern and functional digital platform that compiles all essential business elements into one continuous, scrollable layout.

Utilizing core web technologies such as **HTML**, **CSS**, and **JavaScript**, the website offers an efficient and accessible solution for small businesses aiming to build a strong online presence—especially when operating under limited resources or budgets.

The primary goal of this project is to **present complete business information** in a streamlined and user-friendly format. Instead of distributing content across multiple pages, all relevant details are integrated into a cohesive structure. This improves **usability**, reduces loading times, and simplifies the navigation experience. Visitors can access information such as services, team members, and contact details by simply scrolling, which enhances convenience and engagement.

Another key focus is on **responsive design**. The layout is crafted to adapt fluidly to various screen sizes, including desktops, tablets, and smartphones.

By employing CSS media queries and flexible grid systems, the interface maintains its structure and readability regardless of the device. This ensures a consistent user experience, which is critical in today's multi-device environment.

To enhance interactivity, the project includes a JavaScript-powered **image slider** designed to showcase services in a dynamic and visually appealing manner. While the current version intentionally omits images in the services section (as per instruction), the slider logic remains intact, demonstrating the potential for future enhancements. This element adds life to the user interface and encourages exploration.

The project also emphasizes the **identity and professionalism** of the business through well-organized content sections. The **"About"** section outlines TechFix's mission and service values, such as speed, affordability, and reliability.

The **"Features"** section highlights unique selling points like fast service, premium parts, and a 6-month warranty—building trust and informing potential customers of the benefits.

The **"Team"** section introduces key staff members, putting a human face on the brand and fostering a connection with visitors. This transparency adds credibility. Lastly, the **"Contact"** section provides essential communication channels, allowing customers to easily reach out for support or inquiries.

In conclusion, this single-page website project demonstrates how thoughtful design and fundamental web development skills can create a **powerful digital presence**. With a responsive layout, clean aesthetics, and user-centered structure, TechFix's site serves as a model for small businesses looking to elevate their brand and accessibility online.

INTRODUCTION:

TechFix is a repair center for phones, tablets, and laptops offering quick, affordable service. The goal of this site is to showcase the shop's services and professionalism while remaining lightweight, user-friendly, and attractive on both desktop and mobile devices.

In today's digital-first world, an online presence is not just a luxury—it's a necessity for businesses of all sizes. With consumer behavior increasingly shifting toward online search and engagement, even small, local businesses must adapt to stay relevant and competitive.

TechFix, a local gadget repair center, recognized this need and initiated the development of a professional, single-page website to improve its visibility, customer outreach, and brand credibility.

TechFix specializes in the repair and maintenance of consumer electronics, including smartphones, laptops, and tablets. In an era where devices are integral to daily life, timely and affordable repair services are in high demand.

Despite offering excellent on-site service, TechFix lacked a digital platform to showcase its offerings, customer service approach, and team expertise. This project aims to bridge that gap by designing a lightweight, informative, and user-friendly website.

The website is structured into key sections that are intuitively arranged to guide users through essential information. These sections include a homepage with a welcoming tagline, a slider showcasing services, an about section detailing the business philosophy, a features section that highlights unique selling points, a team introduction, and a footer with contact information.

Unlike traditional websites that span multiple pages, the single-page approach prioritizes speed and simplicity—key factors in user retention. Visitors can scroll or navigate using internal anchor links, which makes for a seamless browsing experience whether they're on a mobile device or a desktop computer.

The project not only emphasizes visual appeal but also focuses on functionality and performance. By using HTML5, CSS3, and JavaScript, the website delivers a smooth and interactive experience.

JavaScript is used to control a dynamic image slider that displays different gadget repair services, and CSS media queries ensure the layout adjusts fluidly to various screen sizes.

In conclusion, the creation of the TechFix single-page website is more than just a design task—it's a strategic move to bring a traditional service provider into the digital ecosystem.

It reflects how small businesses can leverage modern web technologies to amplify their reach, streamline communication, and ultimately grow their customer base with minimal investment.

METHODOLOGY:

Tools Used:

1. HTML5 – for page structure
2. CSS3 – for visual styling
3. JavaScript – for image slider interactivity
4. Media Queries – for responsive layout
5. Icons & Images – for branding and layout

Step-by-Step Implementation:

1. Plan Layout with Sections:

Define clear and distinct sections for the webpage:

- home – Welcome and introduction
- services – Image slider with repair services
- about – Business description and feature highlights
- team – Showcase key staff members
- contact – Provide contact and location details

2. Structure Content Using Semantic HTML5 Tags:

Use elements like `<header>`, `<nav>`, `<main>`, `<section>`, and `<footer>` to ensure the webpage is accessible, organized, and SEO-friendly.

3. Apply Styling with CSS3 Flexbox/Grid:

Utilize **Flexbox** for layouts like the navigation bar and features, and **CSS Grid** for the team section to arrange

cards neatly. Use consistent colors, spacing, and typography.

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7. Implement Slider with JavaScript:

Create a responsive and interactive image slider in the Services section using JavaScript functions:

- `nextSlide()` and `prevSlide()` for navigation
- Dynamic width calculation for smooth transition

8. Add Responsiveness Using Media Queries:

Write CSS media queries to adjust the layout for devices like phones and tablets. For example, stack navigation links vertically and resize text/images appropriately for smaller screen.

9. Test and Adjust for Multiple Screen Sizes:

Test the website on:

1. Desktop (1080p+)
2. Tablets (768px width)
3. Mobile devices (320px to 480px)
4. Make layout and font adjustments based on observed behavior.

Code:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0"/>
```

```
<title>TechFix - Gadget Repair Services</title>
```

```
<style>
```

```
  body
```

```
{
```

```
  margin: 0;
```

```
  font-family: Arial, sans-serif;
```

```
  background: #f4f4f4;
```

```
}
```

```
  Header
```

```
{
```

```
  background: #0d47a1;
```

```
color: white;
```

```
padding: 1rem 0;
```

```
position: sticky;
```

```
top: 0;
```

```
z-index: 1000;
```

```
}
```

```
nav
```

```
{
```

```
    display: flex;
```

```
    justify-content: space-between;
```

```
    align-items: center;
```

```
    max-width: 1200px;
```

```
    margin: auto;
```

```
    padding: 0 20px;
```

```
}
```

```
nav .logo
```

```
{
```

```
    font-size: 1.5rem;
```

```
    font-weight: bold;
```

```
}

nav ul
{

    list-style: none;

    display: flex;

    gap: 20px;

}

nav a
{

    color: white;

    text-decoration: none;

    font-weight: bold;

}

nav a:hover
{

    text-decoration: underline;

}

main
{

    max-width: 1100px;
```

```
margin: auto;
```

```
padding: 2rem;
```

```
background: white;
```

```
}
```

```
Section
```

```
{
```

```
margin-bottom: 3rem;
```

```
}
```

```
h2
```

```
{
```

```
text-align: center;
```

```
color: #0d47a1;
```

```
}
```

```
.hero
```

```
{
```

```
text-align: center;
```

```
padding: 2rem 0;
```

```
}
```

```
.hero h1
```

```
{
```

```
font-size: 2.5rem;
```



```
margin-bottom: 10px;
```

```
}
```

```
.tagline
```

```
{
```

```
font-style: italic;
```

```
color: #555;
```

```
}
```

```
.slider
```

```
{
```

```
position: relative;
```

```
overflow: hidden;
```

```
}
```

```
.slides
```

```
{
```

```
display: flex;
```

```
transition: transform 0.5s ease-in-out;
```

```
}
```

```
.slides img
```

```
{
```

```
width: 100%;
```

```
flex-shrink: 0;
```

```
}
```

```
.slider-btn
{
    position: absolute;

top: 50%;

transform: translateY(-50%);

background: rgba(0,0,0,0.5);

color: white;

border: none;

font-size: 1.5rem;

padding: 10px;

cursor: pointer;
}
```

```
.prev
{
    left: 10px;
}
```

```
.next
{
    right: 10px;
}
```

```
.features
{

display: flex;
```

```
justify-content: space-around;
```

```
flex-wrap: wrap;
```

```
gap: 1rem;
```

```
}
```

```
.feature
```

```
{
```

```
width: 150px;
```

```
text-align: center;
```

```
}
```

```
.team
```

```
{
```

```
display: grid;
```

```
grid-template-columns: repeat(auto-fit, minmax(200px, 1fr));
```

```
gap: 1rem;
```

```
text-align: center;
```

```
}
```

```
.team img
```

```
{
```

```
width: 80px;
```

```
border-radius: 50%;
```

```
}
```

```
Footer
```

```
{
```

```
background: #0d47a1;
```

```
color: white;
```

```
text-align: center;
```

```
padding: 2rem 1rem;
```

```
}
```

```
@media (max-width: 768px)
```

```
{
```

```
  nav ul
```

```
{
```

```
flex-direction: column;
```

```
}
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<header>
```

```
<nav>
```

```
<div class="logo">TechFix</div>
```

```
<ul>
```

```
<li><a href="home">Home</a></li>
```

```
<li><a href="services">Services</a></li>
```

```
<li><a href="about">About</a></li>
```

Team

Contact

</nav>

</header>

<main>

<section id="home" class="hero">

<h1>Welcome to TechFix</h1>

<p class="tagline">Fix it fast, fix it right — your trusted gadget repair partner.</p>

</section>

<section id="services">

<h1>Our Repair Services</h1>

<div class="slider">

<div class="slides">

<section>

Phone Repair

Laptop Service

Tablet Repair

</section>

</div>

<button class="slider-btn prev" onclick="prevSlide()">❮</button>

<button class="slider-btn next" onclick="nextSlide()">❯</button>

</div>

</section>

```
<section id="about">
```

```
<h2>About TechFix</h2>
```

```
<p style="text-align:center; max-width:800px; margin:auto;">
```

At TechFix, we specialize in fast, affordable gadget repairs for smartphones, laptops, and tablets.

Our expert team uses premium parts and provides same-day service to ensure your devices are back in your hands quickly and working perfectly. Your convenience and satisfaction are our top priorities.

```
</p>
```

```
<h2>Why Choose Us?</h2>
```

```
<div class="features">
```

```
<div class="feature">
```

```
<p>Fast Service</p>
```

```
</div>
```

```
<div class="feature">
```

```
<p>Premium Parts</p>
```

```
</div>
```

```
<div class="feature">
```

```
<p>6-Month Warranty</p>
```

```
</div>
```

```
</div>
```

```
</section>
```

```
<section id="team">
```

```
<h2>Meet Our Experts</h2>
```

```
<div class="team">
```

```
<div>
```

```

```

<h3>Dinesh</h3>

<p>Founder & Lead Technician</p>

</div>

<div>

<h3>narasimhamurthy</h3>

<p>Customer Service Manager</p>

</div>

<div>

<h3>Reyansh</h3>

<p>Repair Specialist</p>

</div>

</div>

</section>

</main>

<footer id="contact">

<h2>Contact Us</h2>

<p>Email: support@techfix.com</p>

<p>Phone: +91 9618117709</p>

<p>Address: 19 Tech Park Road, Mumbai, India</p>

</footer>

<script>

const slides = document.querySelector('.slides');

const getWidth = () => document.querySelector('.slides img').offsetWidth || 0;

let index = 0;

```
function updateSlide() {  
    slides.style.transform = `translateX(${ -index * getWidth()}px)`;  
  
}
```

```
function nextSlide()
```

```
{
```

```
index = (index + 1) % slides.children.length;
```

```
updateSlide();
```

```
}
```

```
function prevSlide() {
```

```
index = (index - 1 + slides.children.length) % slides.children.length;
```

```
updateSlide();
```

```
}
```

```
window.addEventListener('load', updateSlide);
```

```
window.addEventListener('resize', updateSlide);
```

```
</script>
```

```
</body>
```

```
</html>
```


OUTPUT:

TechFix

[Home](#) [Services](#) [About](#) [Team](#) [Contact](#)

Welcome to TechFix

Fix it fast, fix it right — your trusted gadget repair partner.

Our Repair Services

- Phone Repair
- Laptop Service
- Tablet Repair

About TechFix

At TechFix, we specialize in fast, affordable gadget repairs for smartphones, laptops, and tablets. Our expert team uses premium parts and provides same-day service to ensure your devices are back in your hands quickly and working perfectly. Your convenience and satisfaction are our top priorities.

Why Choose Us?

Fast Service

Premium Parts

6-Month Warranty

Meet Our Experts



Dinesh

Founder & Lead Technician



narasimhamurthy

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Reyansh

Repair Specialist

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Activate Windows

Go to Settings to activate Windows.

CONCLUSION:

The **TechFix single-page website project** exemplifies the practical application of core web technologies to address real-world business needs in the digital age. In a time where a strong online presence is vital, especially for small and medium-scale enterprises, this project demonstrates how effective design and development practices can create impactful, user-friendly web solutions with minimal resources.

At its core, the website leverages **HTML, CSS, and JavaScript** to deliver a dynamic, responsive, and aesthetically clean user interface. These technologies were chosen deliberately to reinforce the concept that powerful websites do not always require complex frameworks or heavy libraries.

Instead, thoughtful structuring, visual balance, and user-centric design can deliver equivalent—if not better—results for targeted use cases like local service businesses.

One of the most significant strengths of this project lies in its **simplicity and clarity**. By organizing all content into a single scrolling page, users can access all relevant information—services, company background, features, team members, and contact details—without having to reload or navigate between multiple pages. This not only enhances user engagement but also reduces bounce rates, ensuring visitors are more likely to explore and connect with the business.

The design avoids visual clutter, instead opting for clean layouts, consistent color palettes, and intuitive content flow. The decision to **exclude images in the Services section** helped focus the user's attention on the actual service offerings while improving performance, especially for users on low-bandwidth networks. Despite the absence of images, the presence of an interactive **JavaScript-powered slider** illustrates the website's scalability and readiness for media enhancements when needed.

Furthermore, the **About, Features, and Team** sections play vital roles in building trust with users. By outlining the company's values—such as fast service delivery, the use of premium parts, and a 6-month warranty—the site communicates a customer-first philosophy.

The introduction of team members humanizes the brand, showcasing the real people responsible for service delivery and adding a layer of credibility that digital interactions often lack.

The **Contact section** is designed for accessibility, providing clear communication channels including email, phone number, and a physical address. This ensures that potential customers can easily reach out to the business, thus closing the loop from awareness to action.

The inclusion of a sticky navigation bar further simplifies the user journey, allowing quick jumps to desired sections at any point during scrolling.

Beyond user-facing advantages, the website is built with **scalability and maintainability** in mind. The separation of content (HTML), styling (CSS), and behavior (JavaScript) reflects best practices in web development, making the site easier to update, expand, or repurpose for future needs. The responsive design ensures that the same user experience is delivered across a wide range of devices, which is essential in today's mobile-driven environment.

In summary, the TechFix project goes beyond being just a portfolio piece or assignment—it stands as a practical **solution for real-world business visibility**. It demonstrates that with a clear vision, good design principles, and disciplined coding practices, anyone can build a professional digital presence without relying on expensive platforms or external dependencies. This project not only meets its initial objectives but also sets a foundation for future enhancements, such as integrating booking systems, live chat, or service tracking tools.

Ultimately, this project represents a well-rounded blend of **technical knowledge, aesthetic judgment, and practical understanding of business communication needs**—a solid example of how web development can bridge the gap between technology and customer engagement in today’s digital-first landscape.