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document.addEventListener("DOMContentLoaded", () => {
  // Menu Mobile Toggle
  const navSlide = () => {
    const burger = document.querySelector(".burger");
    const nav = document.querySelector(".nav-links");
    const navLinks = document.querySelectorAll(".nav-links li");

    burger.addEventListener("click", () => {
      // Toggle Nav
      nav.classList.toggle("nav-active");

      // Animate Links
      navLinks.forEach((link, index) => {
        if (link.style.animation) {
          link.style.animation = "";
        } else {
          link.style.animation = `navLinkFade 0.5s ease forwards
${index / 7 + 0.3}s`;
        }
      });

      // Burger Animation
      burger.classList.toggle("toggle");

      // Update ARIA attribute
      const isExpanded = burger.getAttribute("aria-expanded") === "true";
      burger.setAttribute("aria-expanded", !isExpanded);
    });

    // Close menu when clicking on a link
    navLinks.forEach(link => {
      link.addEventListener("click", () => {
        nav.classList.remove("nav-active");
        burger.classList.remove("toggle");
        burger.setAttribute("aria-expanded", "false");
        navLinks.forEach(l => {
          l.style.animation = "";
        });
      });
    });
  };

  // Smooth Scroll
  const smoothScroll = () => {
    document.querySelectorAll("a[href^=\"#\"]").forEach(anchor => {
      anchor.addEventListener("click", function (e) {
        e.preventDefault();
        const target =
document.querySelector(this.getAttribute("href"));

        if (target) {
          const headerOffset = 80;
          const elementPosition = target.getBoundingClientRect().top;
          const offsetPosition = elementPosition + window.pageYOffset
- headerOffset;

          window.scrollTo({
            top: offsetPosition,
            behavior: "smooth"
          });
        }
      });
    });
  };
};

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// Form Validation
const formValidation = () => {
  const contactForm = document.querySelector(".contact-form");
  if (contactForm) {
    const nameInput = document.getElementById("name");
    const emailInput = document.getElementById("email");
    const messageInput = document.getElementById("message");

    // Real-time validation
    emailInput.addEventListener("blur", () => {
      if (emailInput.value && !validateEmail(emailInput.value)) {
        emailInput.style.borderColor = "#dc3545";
      } else {
        emailInput.style.borderColor = "#ddd";
      }
    });

    contactForm.addEventListener("submit", (e) => {
      e.preventDefault();
      const name = nameInput.value.trim();
      const email = emailInput.value.trim();
      const message = messageInput.value.trim();

      // Clear previous error states
      nameInput.style.borderColor = "#ddd";
      emailInput.style.borderColor = "#ddd";
      messageInput.style.borderColor = "#ddd";

      let hasError = false;

      if (name === "") {
        nameInput.style.borderColor = "#dc3545";
        hasError = true;
      }

      if (email === "") {
        emailInput.style.borderColor = "#dc3545";
        hasError = true;
      } else if (!validateEmail(email)) {
        emailInput.style.borderColor = "#dc3545";
        alert("Por favor, insira um endereço de e-mail válido.");
        return;
      }

      if (message === "") {
        messageInput.style.borderColor = "#dc3545";
        hasError = true;
      }

      if (hasError) {
        alert("Por favor, preencha todos os campos do formulário.");
        return;
      }

      // Success
      alert("Mensagem enviada com sucesso! Em breve entraremos em contato.");
      contactForm.reset();
    });
  }
};

// Email Validation
const validateEmail = (email) => {

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const re = /^(("[^<>()\\.\,;:\s@" ]+(\. "[^<>()\\.\,;:\s@" ]+)*)|
("\. +\."))@((\[[0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\])|((\[[a-zA-Z\-\0-
9]+\.\. )+[a-zA-Z]{2,}))$)/;
return re.test(String(email).toLowerCase());
};

// Fade-in Sections on Scroll
const fadeInSections = () => {
  const sections = document.querySelectorAll("section");
  const options = {
    root: null,
    threshold: 0.15,
    rootMargin: "0px"
  };

  const observer = new IntersectionObserver((entries, observer) => {
    entries.forEach(entry => {
      if (entry.isIntersecting) {
        entry.target.classList.add("fade-in");
      }
    });
  }, options);

  sections.forEach(section => {
    observer.observe(section);
  });
};

// Button Hover Animation Enhancement
const enhanceButtons = () => {
  const buttons = document.querySelectorAll(".btn");
  buttons.forEach(button => {
    button.addEventListener("mouseenter", function() {
      this.style.transform = "translateY(-3px) scale(1.05)";
    });
    button.addEventListener("mouseleave", function() {
      this.style.transform = "translateY(0) scale(1)";
    });
  });
};

// Service Cards Animation
const animateServiceCards = () => {
  const serviceItems = document.querySelectorAll(".service-item");
  const options = {
    root: null,
    threshold: 0.2,
    rootMargin: "0px"
  };

  const observer = new IntersectionObserver((entries) => {
    entries.forEach((entry, index) => {
      if (entry.isIntersecting) {
        setTimeout(() => {
          entry.target.style.opacity = "1";
          entry.target.style.transform = "translateY(0)";
        }, index * 150);
      }
    });
  }, options);

  serviceItems.forEach(item => {
    item.style.opacity = "0";
    item.style.transform = "translateY(30px)";
    item.style.transition = "opacity 0.6s ease, transform 0.6s ease";
    observer.observe(item);
  });
};

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    });  
};  
  
// Initialize all functions  
navSlide();  
smoothScroll();  
formValidation();  
fadeInSections();  
enhanceButtons();  
animateServiceCards();  
  
// Add scroll event for header shadow  
window.addEventListener("scroll", () => {  
    const header = document.querySelector("header");  
    if (window.scrollY > 100) {  
        header.style.boxShadow = "0 4px 20px rgba(0,0,0,0.3)";  
    } else {  
        header.style.boxShadow = "0 2px 10px rgba(0,0,0,0.2)";  
    }  
});  
});
```