



Academy of Digital Arts Egypt - HTML & CSS Capstone Project

Objective:

By completing this task, you will:

- > Create a complete, professional website using semantic HTML structure
- > Implement advanced CSS layout techniques including Grid, Flexbox, and responsive design
- > Apply modern CSS features including custom properties, animations, and transitions
- Build a real-world project suitable for your professional portfolio
- > Demonstrate mastery of all HTML and CSS concepts from the course series
- > Create a fully responsive website that works across all devices and screen sizes

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Step 1 – Project Planning and HTML Structure

- Create a digital marketing agency website with 5 main pages: Home, About, Services, Portfolio, and Contact
- > Set up proper HTML5 document structure with semantic elements (header, nav, main, section, aside, footer)
- > Implement a consistent navigation system across all pages using proper HTML structure
- > Create forms with appropriate input types, validation attributes, and accessibility features
- ➤ Use proper heading hierarchy (h1-h6) and semantic markup throughout all pages

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Step 2 – Design System Implementation with CSS Variables

- Create a comprehensive design system using CSS custom properties for colors, typography, and spacing
- > Implement a professional color palette with primary, secondary, and neutral colors
- > Set up a responsive typography scale using CSS variables and relative units
- Create consistent spacing scale for margins, padding, and component sizing
- > Design both light and dark theme variations using CSS variables and prefers-color-scheme

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Step 3 – Advanced Layout with CSS Grid and Flexbox

- > Build the homepage hero section using CSS Grid for complex layout arrangement
- > Create a services section with responsive card layout using CSS Grid auto-fit and minmax
- > Design a portfolio gallery showcasing projects with CSS Grid masonry-style layout
- > Implement navigation bar using Flexbox with responsive mobile hamburger menu
- > Build footer with multiple columns using Flexbox that adapts to different screen sizes

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Step 4 – Responsive Design and Media Queries

- > Implement mobile-first responsive design approach across all pages
- > Create breakpoints for mobile (default), tablet (768px+), and desktop (1024px+) layouts
- > Use advanced media queries for device capabilities (hover, pointer precision, reduced motion)
- > Ensure all interactive elements are touch-friendly with appropriate sizing
- > Test and optimize typography, spacing, and layouts for all device sizes

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Step 5 – Interactive Elements and Animations

- > Add smooth CSS transitions for all interactive elements (buttons, links, forms)
- Create engaging hover effects for portfolio items and service cards
- > Implement loading animations and entrance effects using CSS keyframes
- > Add smooth scrolling navigation and subtle micro-interactions throughout the site
- > Ensure all animations respect accessibility preferences (prefers-reduced-motion)

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Step 6 – Performance and Polish

- Optimize images and ensure proper alt attributes for accessibility
- > Implement proper semantic HTML for screen readers and SEO
- > Add CSS transitions and animations that enhance user experience
- > Test website across multiple browsers and devices for compatibility
- ➤ Validate HTML and CSS code for errors and best practices compliance

Requirements

Technical Specifications:

- > HTML5: Semantic structure, proper form elements, accessibility attributes
- > CSS Grid: Complex layouts, responsive galleries, advanced positioning
- Flexbox: Navigation, component layouts, content alignment
- CSS Variables: Design system, theming, responsive values
- Media Queries: Mobile-first responsive design, device capability detection
- > Animations: Transitions, keyframes, performance-optimized effects

Requirements

Page Requirements:

- ➤ Homepage: Hero section, services overview, featured portfolio items, client testimonials
- ➤ About Page: Company story, team member grid, company values section
- > Services Page: Detailed service offerings with pricing tables or information cards
- > Portfolio Page: Project showcase with filtering or categories, detailed project information
- > Contact Page: Contact form, company information, location map or details

Requirements

Content Guidelines:

- Use realistic, professional content for a digital marketing agency
- > Include placeholder images with proper dimensions and alt text
- > Create believable company information, team member profiles, and project descriptions
- Ensure all content is appropriate for a business website portfolio piece

Requirements

Browser Support:

- Modern browsers (Chrome, Firefox, Safari, Edge)
- ➤ Mobile browsers (iOS Safari, Chrome Mobile)
- Responsive design tested on devices from 320px to 1920px width

Reminder

- Focus on creating a professional website that demonstrates your technical skills
- Ensure your code is clean, well-commented, and follows best practices
- > Test your website thoroughly on different devices and screen sizes
- > Pay attention to accessibility and ensure your site can be navigated by keyboard
- Use Git version control to track your progress and changes
- > This project should showcase ALL skills learned throughout the HTML and CSS course series
- > Remember that this website will be a key piece in your developer portfolio

Bonus Challenges (Optional):

- > Implement a working contact form using form validation
- Add a blog section with article layouts
- Create a style guide page documenting your design system
- > Implement advanced CSS features like CSS custom properties with calc() functions
- > Add subtle parallax effects or advanced animations (while maintaining performance)

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