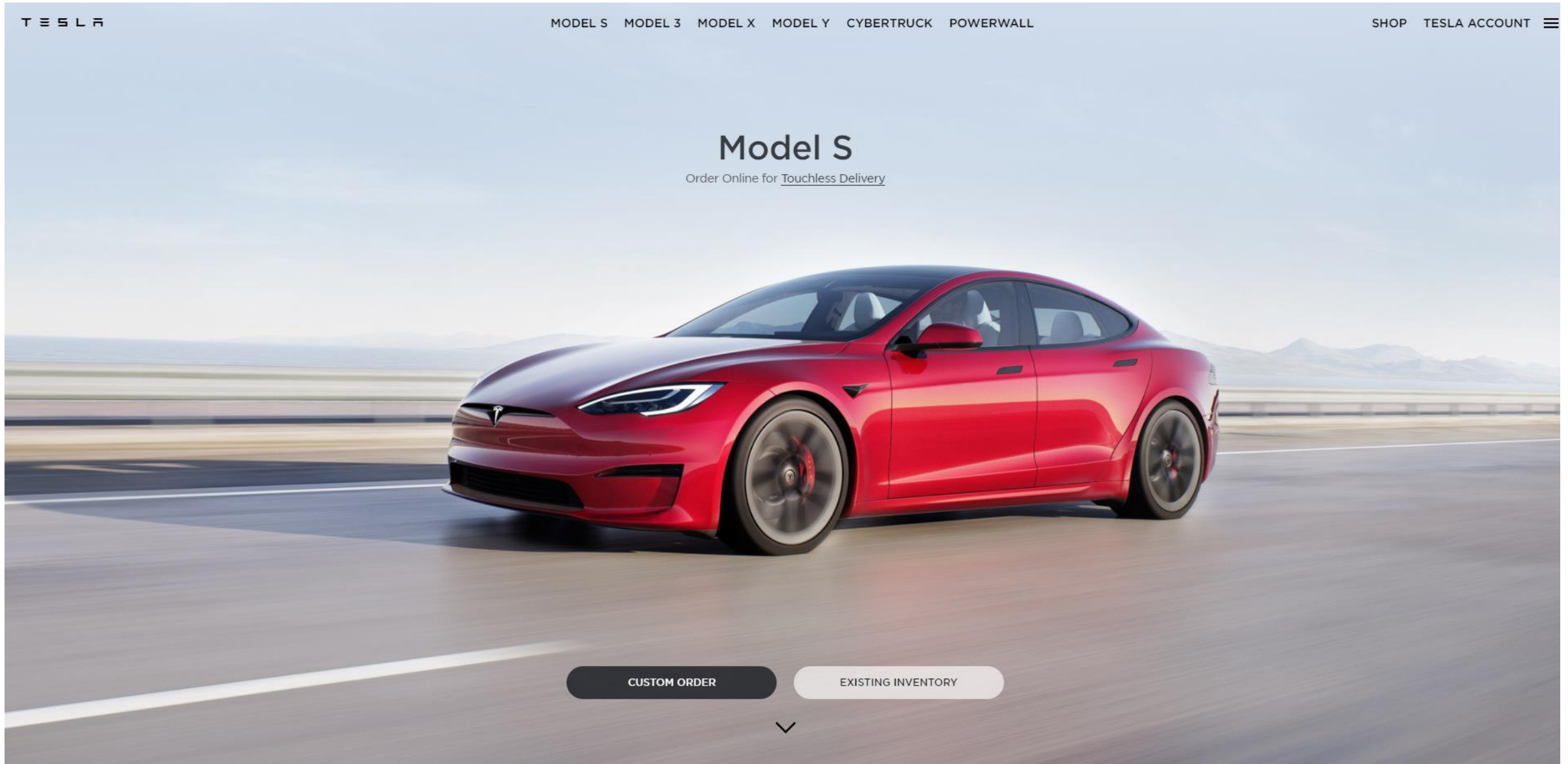


# WEB DEVELOPMENT AND DESIGN

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A PRESENTATION  
BY  
MADHAV MURTHY

# INTRODUCTION TO WEBSITE DESIGN AND DEVELOPMENT





PRODUCTS

LOCATE US

Search products



English



Region



ME

## INTRODUCING

# BLUSH

## SENSOR FAUCETS

For hands free hygiene.

Minimalistic design, high accuracy.



Sensory  
Intelligence



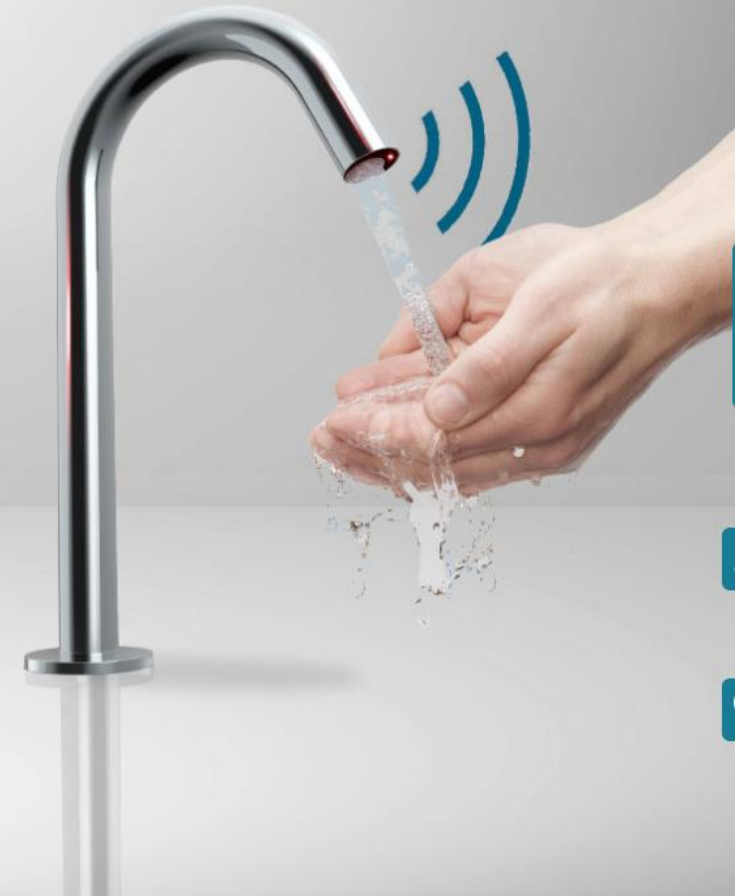
Concealed  
Sensor



Quick and  
Reliable



Adjustable  
Distance



# INTRODUCTION TO WEBSITE DESIGN AND DEVELOPMENT

The screenshot displays the Amazon India homepage with a dark blue header. The header includes the Amazon logo, a search bar, and navigation links for account, orders, and cart. Below the header is a horizontal menu with categories like All, Best Sellers, Mobiles, Today's Deals, Fashion, New Releases, Prime, Electronics, Customer Service, Amazon Pay, Home & Kitchen, Computers, Books, Toys & Games, and Sell. A sign-in prompt is visible on the right side of the header.

The main content area features a large banner for the Samsung Galaxy M51, highlighting its 7000mAh battery and a price reduction from ₹28,999 to ₹22,999. Below this banner are several category-specific promotional tiles:

- Trending now cooling appliances | Up to 40% off**: This tile promotes window and split ACs, with prices starting from ₹17,999 and ₹23,499 respectively. It also includes single and double door refrigerators starting from ₹10,190 and ₹17,990.
- Top picks for your home**: This tile showcases a variety of home appliances including ACs, refrigerators, televisions, and washing machines, with a 'See more' link.
- Styles for Women | Up to 70% off**: This tile features women's clothing, footwear, handbags, watches, and fashion jewelry, with a 'View all offers' link.
- Sign in for your best experience**: A prompt to sign in securely.
- LAPTOPS FROM TOP BRANDS**: A sponsored section for laptops.
- Styles for Men | Up to 70% off**: A section for men's clothing.
- Professional tools, testing & more**: A section for professional tools and equipment.
- Revamp your home in style**: A section for home decor and furniture.
- Everyday essentials**: A section for household cleaning and personal care products.

## INTRODUCTION TO WEBSITE DESIGN AND DEVELOPMENT

- Websites are at the heart of successful digital marketing.
- They are your home on the web, a shop window over which you have full control, and often the first place people stop to find out more about you.
- Web development and design applies to more than just websites – the principles can be used for any digital assets you create, from mobile platforms to social media profiles.
- Creating online assets involves three key processes – planning and design, which create the appearance, layout and style that users see, and development, which brings this imagery to life as a functioning web tool.
- The fundamental principle of good development and design is to understand your users: the people who will actually be using and interacting with your website.
- What are they looking for? What are their objectives? Your offering must have user experience central to the process.

# INTRODUCTION TO WEB DESIGN

- Web design governs everything involved with the visual aesthetics and usability of a website—color scheme, layout, information flow, and everything else related to the visual aspects of the UI/UX (user interface and user experience)
- Web design is concerned with what the user actually sees on their computer screen or mobile device, and less so about the mechanisms beneath the surface that make it all work
- Through the use of color, images, typography, and layout, they bring a digital experience to life
- A web designer works on the appearance, layout, and, in some cases, content of a website
- Web designers must always begin by considering a client's website objectives and then move on to an Information Architecture (IA) to set a website's information hierarchy and help guide the design process
- web designers can start creating wireframes and finally move to the design stage.
- Web designers may use several basic design principles to achieve an aesthetically pleasing layout which also offers excellent user experience



## Design Principles

- Balance** – It's important for web designers to create a balanced layout. In web design we refer to heavy (large and dark colors) and light (small and lighter colors) elements. Using the correct proportion of each is critical to achieving a balanced website design.
- Contrast** – In color theory, contrasting colors are ones placed opposite one another on the color wheel (see also complementary colors). Web design offers a few other areas where contrast is applicable. Designers look at contrasting sizes, textures and shapes to define and draw attention to certain sections of the website
- Emphasis** – We touched on this a bit when discussing contrast. Emphasis is a design principles founded in the intentional “highlighting” of certain important elements of the website layout. It's important to note that if you emphasize everything on the page you end up emphasizing nothing. Imagine a page in a book where 80% of the content is highlighted in yellow...does anything really stand out? This is the time to take a look at that Information Architecture for direction
- Consistency** – Also called repetition or rhythm, consistency is a critical web design principle. For example, clean and consistent navigation provides the best user experience for your website visitors
- Unity** – Unity is the relationship between the various parts of the website layout and the composition as a whole. Based in the Gestalt theory, unity deals with how the human brain visually organizes information by grouping elements into categories.

## SOME KEY TERMINOLOGIES

- Above the fold: The content that appears on a screen without a user having to scroll
- Content Management System (CMS): A system that allows an administrator to update the content of a website, so that a developer is not required to do so
- Information architecture: The way in which data and content are organised, structured and labelled to support usability
- Landing page: The page a user reaches when clicking on a paid or organic search engine listing. The pages that have the most success are those that match up as closely as possible with the user's search query
- Navigation: How a web user moves through a website, and the elements that assist the user in doing so
- Open source: Unlike proprietary software, open source software makes the source code available so that other developers can build applications for the software, or even improve on the software
- Universal Resource Locator (URL): A web address that is unique to every page on the Internet



# WEB DESIGN

## ☐ Visual identity and designing for persuasion:

- Navigation: the signage of the site, indicating to users where they are and where they can go.
- Layout: how content is structured and displayed
- Headers: the usually consistent top part of a web page
- Footers: as you may have guessed, the usually consistent bottom part of the page
- Credibility: telling users that you are who you say you are

## ☐ Design Theory

## ☐ Colour theory

## ☐ Collecting and Collating design assets

# WEB DEVELOPMENT

- Web development is the building and maintenance of websites
- Web development governs all the code that makes a website tick. It can be split into two categories—front-end and back-end.
- The front-end or client-side of an application is the code responsible for determining how the website will actually display the designs mocked up by a designer.
- The back-end or server-side of an application is responsible for managing data within the database and serving that data to the front-end to be displayed
- Some common skills and tools traditionally viewed as unique to the front-end developer are :
  - HTML/CSS/JavaScript
  - CSS preprocessors (i.e., LESS or Sass)
  - Frameworks (i.e., AngularJS, ReactJS, Ember)
  - Libraries (i.e., jQuery)
  - Git and GitHub

## ☐ Static website or CMS

There are three types of CMS to choose from:

- Bespoke: This is a CMS that is built specifically for a certain website
- Off the shelf: A CMS can also be pre-built by an external company or developer
- Open Source: Open source means that anyone can see the code that the CMS is built with, and can manipulate or improve it

## ☐ Server-side languages

- Cost
- Scalability

## ☐ Front end languages

- Cost
- Features
- Scalability

# STEP BY STEP GUIDE TO BUILDING A WEBSITE

Step 1: Planning and research; starts with research: your market, your users, your competitors and your business business objectives? Potential users?

Step 2: Domain name: Domain names are the part of URL of a website

Domain – the registered domain name of the website

- Subdomain – a domain that is part of a larger domain
- TLD – the top level domain, uppermost in the hierarchy of domain names
- directory – a folder to organize content

Step 3: UX and content strategy

Step 4: Search engine visibility

Step 5: Design

Step 6: Development

Step 7: Testing and launch