

This is the report about my web design course.

1. -Web Design and Development

Web development is the work involved in developing a website for the Internet (World Wide Web) or an intranet (a private network).[1] Web development can range from developing a simple single static page of plain text to complex web applications, electronic businesses, and social network services. A more comprehensive list of tasks to which Web development commonly refers, may include Web engineering, Web design, Web content development, client liaison, client-side/server-side scripting, Web server and network security configuration, and e-commerce development.

Among Web professionals, "Web development" usually refers to the main non-design aspects of building Web sites: writing markup and coding.[2] Web development may use content management systems (CMS) to make content changes easier and available with basic technical skills.

For larger organizations and businesses, Web development teams can consist of hundreds of people (Web developers) and follow standard methods like Agile methodologies while developing Web sites. Smaller organizations may only require a single permanent or contracting developer, or secondary assignment to related job positions such as a graphic designer or information systems technician. Web development may be a collaborative effort between departments rather than the domain of a designated department. There are three kinds of Web developer specialization: front-end developer, back-end developer, and full-stack developer. Front-end developers are responsible for behavior and visuals that run in the user browser, while back-end developers deal with the servers.

2. NCC-Fund.Princip.of Color & Des

color theory is both the science and art of using color. It explains how humans perceive color; and the visual effects of how colors mix, match or contrast with each other. Color theory also involves the messages colors communicate; and the methods used to replicate color.

In color theory, colors are organized on a color wheel and grouped into 3 categories: primary colors, secondary colors and tertiary colors. More on that later.

Humans see colors in light waves. Mixing light—or the additive color mixing model—allows you to create colors by mixing red, green and blue light sources of various intensities. The more light you add, the brighter the color mix becomes. If you mix all three colors of light, you get pure, white light.

TVs, screens and projectors use red, green and blue (RGB) as their primary colors, and then mix them together to create other colors.

3M-ImageProcessing

Digital image processing is the use of a digital computer to process digital images through an algorithm. As a subcategory or field of digital signal processing, digital image processing has many advantages over analog image processing. It allows a much wider range of algorithms to be applied to the input data and can avoid problems such as the build-up of noise and distortion during processing. Since images are defined over two dimensions (perhaps more) digital image processing may be modeled in the form of multidimensional systems. The generation and development of digital image processing are mainly affected by three factors: first, the development of computers; second, the development of mathematics (especially the creation and improvement of discrete mathematics theory); third, the demand for a wide range of applications in environment, agriculture, military, industry and medical science has increased.

4. 1L1-ComputerIllustration

Digital illustration or computer illustration is the use of digital tools to produce images under the direct manipulation of the artist, usually through a pointing device such as a tablet or a mouse. It is distinguished from computer-generated art, which is produced by a computer using mathematical models created by the artist. It is also distinct from digital manipulation of photographs, in that it is an

original construction "from scratch". Photographic elements such as background or texture may be incorporated into such works, but they are not necessarily the primary basis.

5. CW1-WebDesig.&Develop.I

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6. C1U-UserInterfaceDesign

User interface (UI) design is the process designers use to build interfaces in software or computerized devices, focusing on looks or style. Designers aim to create interfaces which users find easy to use and pleasurable. UI design refers to graphical user interfaces and other forms—e.g., voice-controlled interfaces.

User interfaces are the access points where users interact with designs. They come in three formats:

Graphical user interfaces (GUIs)—Users interact with visual representations on digital control panels. A computer's desktop is a GUI.

Voice-controlled interfaces (VUIs)—Users interact with these through their voices. Most smart assistants—e.g., Siri on iPhone and Alexa on Amazon devices—are VUIs. Gesture-based interfaces—Users engage with 3D design spaces through bodily motions: e.g., in virtual reality (VR) games.

7. T1A-AdavancedImageProcessing

: Digital image processing has various applications ranging from remote sensing and entertainment to medical applications. This course explores a few major areas of digital image processing at an advanced level, with primary emphasis on medical applications. Topics covered include image segmentation, image registration, validation of image processing algorithms, and image processing using the Insight Toolkit (ITK) and Jupyter Notebook. Examples will be presented to give the students exposure to real-world applications.

8. C11-InteractiveContent-I

Interactive Content is content that requires the audience to interact or engage with the content piece. It's more like a two-way conversation between you and your audience. It requires active participation from both sides.

81% of marketers agree that interactive content grabs user attention more efficiently than static content. Not only that, the interactivity of the content keeps the audience engaged for a longer period of time. It can be personalized to a great extent even in real-time. Also, the dynamic nature of interactive content urges the user to interact with the content. And this increases user engagement.

9. It helps in lead generation

Interactive content is better at generating leads than static content. Interactive experiences like calculators, quizzes, assessments offers real value to the user. And users tend to give up their contact information willingly if they get something in return.

For example, Mortgage calculators help users to calculate their monthly mortgage payments. So companies selling financial services can use this calculator to generate leads.

Must Read: Interactive Lead Generation Techniques Ebook

10. It helps in lead nurturing and customer acquisition Lead nurturing is the process of establishing and maintaining a relationship with the buyers at every stage of the sales funnel. It requires marketing and communication efforts personalized to the needs of every prospect. This helps to improve brand awareness, build trust, and maintain a steady relationship with buyers until they convert to paying customers.

You can customize your interactive content for every stage of a buyer's journey and use it to nurture your leads effectively. Also, you can use the data from your interactive experiences to better personalize your communication with your prospects.

11. It helps in lead scoring and segmentation

Modern interactive content builders like Outgrow come with high analytical and lead segmenting capabilities. You can segment your leads on the basis of demographics, location, customer behavior, etc. Segmented email campaigns are known to have 14.32% higher open rates. Also, segmentation helps you to build more personalized communication.

12. Interactive content for SEO

Experts are starting to realize that the traditional ways of doing SEO are changing drastically. With every single update algorithm update Google rolls out, it is becoming difficult to rank on SERP. And to add to this problem, we have the ever-changing user behavior as we have just discussed.

13. TYP-Typography

Typography is the art and technique of arranging type to make written language legible, readable and appealing when displayed. The arrangement of type involves selecting typefaces, point sizes, line lengths, line-spacing (leading), and letter-spacing (tracking), as well as adjusting the space between pairs of letters (kerning[1]). The term typography is also applied to the style, arrangement, and appearance of the letters, numbers, and symbols created by the process. Type design is a closely related craft, sometimes considered part of typography; most typographers do not design typefaces, and some type designers do not consider themselves typographers.[2][3] Typography also may be used as an ornamental and decorative device, unrelated to the communication of information.

Typography is the work of typesetters (also known as compositors), typographers, graphic designers, art directors, manga artists, comic book artists, and, now, anyone who arranges words, letters, numbers, and symbols for publication, display, or distribution, from clerical workers and newsletter writers to anyone self-publishing materials. Until the Digital Age, typography was a specialized occupation.

Digitization

opened up typography to new generations of previously unrelated designers and lay users. As the capability to create typography has become ubiquitous, the application of principles and best practices developed over generations of skilled workers and professionals has diminished.[4][5] Thus, at a time when scientific techniques can provide evidence that supports established practice (legibility or brand recognition achieved through the appropriate use of serifs, letter case, letter forms, contrast, spacing, etc.) through understanding the limitations of human vision, typography may be encountered that fails to achieve its principal objective: effective communication.

14. NMW-LayoutFund.forWebsites

The process of mapping out a website layout should occur in the early stages of creating a website—that is, sometime after you’ve established your website strategy but before you jump into a graphics program to create the interface.

A website layout is visualized through a wireframe, which is a basic skeletal map showing how the content will fit together. It is important to distinguish wireframing from web design, which is the whole process of creating front end graphics and other visuals for the web page. Website layout design is a big part of web design, and it starts with wireframing. Ideally, the visual design should follow the wireframe layout so that graphic elements are positioned strategically, rather than on fleeting aesthetics preferences.

15.NFP-Fundamentals of programming

Computer programming (often shortened to programming) is a process that leads from an original formulation of a computing problem to executable computer programs.

Programming involves activities such as analysis, developing understanding, generating algorithms, verification of requirements of algorithms including their correctness and resources consumption, and implementation (commonly referred to as coding) of algorithms in a target programming language.[1] This course comprises nine lessons on the fundamentals of computer programming. Each lesson includes a combination of Wikibooks, Wikipedia, and Internet-based readings, YouTube videos, and hands-on, interactive learning activities. Examples are provided using flowcharts, pseudocode, and a wide variety of computer programming languages.

This entire Wikiversity course can be downloaded in book form by selecting Download Learning Guide in the sidebar. The corresponding Wikipedia reading collection can be downloaded in book form by selecting Download Reading Guide.

16.PHN-Digital Photography

Digital photography uses cameras containing arrays of electronic photodetectors to produce images focused by a lens, as opposed to an exposure on photographic film. The captured images are digitized and stored as a computer file ready for further digital processing, viewing, electronic publishing, or digital printing. They are combined with

other digital images obtained from scanography and other methods that are often used in digital art or media art.

Until the advent of such technology, photographs were made by exposing light sensitive photographic film and paper, which was processed in liquid chemical solutions to develop and stabilize the image. Digital photographs are typically created solely by computer-based photoelectric and mechanical techniques, without wet bath chemical processing.

The first consumer digital cameras were marketed in the late 1990s.[1] Professionals gravitated to digital slowly, and were won over when their professional work required using digital files to fulfill the demands of employers and/or clients, for faster turn-around than conventional methods would allow.[2] Starting around 2000, digital cameras were incorporated in cell phones and in the following years, cell phone cameras became widespread, particularly due to their connectivity to social media websites and email. Since 2010, the digital point-and-shoot and DSLR formats have also seen competition from the mirrorless digital camera format, which typically provides better image quality than the point-and-shoot or cell phone formats but comes in a smaller size and shape than the typical DSLR. Many mirrorless cameras accept interchangeable lenses and have advanced features through an electronic viewfinder, which replaces the through-the-lens finder image of the SLR format.

17.C12-Interactive Content-II

Interactive contents are dynamic materials that encourage user participation in order to convey your message.

They don't necessarily need to be digital. Still, it's on the internet that this type of content gains a myriad of formats — calculators, quizzes, and animated infographics — and generate new possibilities for user interaction.

The power of media interactivity has leaped forward with the emergence of the internet, especially after the popularization of blogs and social networks.

Since then, brands have started to get used to the participation of consumers in their content.

However, Content Marketing relied preponderantly on a logic of passive consumption. In other words, brands publish content and wait for feedback from users, through likes, reactions, comments, shares, or browsing behavior analysis on websites and blogs.

It's already much more interactive than we had in offline marketing or the early days of the internet. Still, brands could go further.

Then, the interactive content emerged to provide a more exciting and fun approach for the consumer, given the vast amount of material they have to consume on the web.

This type of content demands that the user interacts with the material to receive the information they want in a much more attractive way than just reading a text.

Each interaction with the content represents a sign from the user to the brand. Mary Ward, CCO of Rock Content, defined interactive content as something that leads people to give feedback.

It's different, for example, from when the consumer downloads a PDF or reads a text on the blog, since, in these cases, there are no feedbacks during content consumption.

Thus, interactive content allows brands to understand whether people have actually consumed their material while providing a much more exciting experience for the consumer.

18.TAV-Audio & Video Techniques 14.CW2-Web Design & Develop. II

Web design and development is an umbrella term that describes the process of creating a website. Like the name suggests, it involves two major skill sets: web design and web development. Web design determines the look and feel of a website, while web development determines how it functions.

Because there isn't always a hard line that separates the two roles, the titles are often used interchangeably. As the web continues to evolve, so do the roles.

In the almost 30 years since the first website was created, numerous job titles have emerged to describe various skill sets used to create a website, with more coming out every year. These titles often overlap, and their meanings change from company to company. It's enough to make your head spin.

19.P1N-Integration Project

20.CBD-Database Fundamentals

The answer to this question may surprise some readers. Oracle is not a database; neither are Db2, PostgreSQL, MongoDB, MySQL, or SQL Server. Each of these is a DBMS, or database management system. You can use Oracle or Db2 or SQL Server to create a database, but none of these themselves are databases. Many people, even skilled professionals, confuse the overall system — the DBMS — with the creation of the system — databases.

So, what is a database? A database is a structured set of persistent data. A phonebook is a database. However, within the world of IT, a database usually is associated with software. A simple database might be a single file containing many records, each of which contains the same set of fields where each field is a certain data type and length. In short, a database is an organized store of data where the data is accessible by named data elements.

A DBMS is a software package designed to create, store, and manage databases. The DBMS software enables end users or application programmers to share data. It

provides a systematic method of creating, updating, retrieving, and storing information in a database. DBMS products are usually responsible for data integrity, data access control, automated rollback, restart and recovery.

Thinking abstractly, you might think of a database as a file folder, and a DBMS as the file cabinet holding the labeled folders. You implement and access database instances using the capabilities of the DBMS. Your payroll application uses the payroll database, which may be implemented using a DBMS such as Oracle Database 21c, Db2, MongoDB, or SQL Server.

Why is this distinction important? Using precise terms in the workplace avoids confusion. And the less confused we are the more we can avoid problems and issues that lead to over-budget projects, improperly developed systems, and lost productivity. Therefore, precision should be important to all of us.

20.LS1-Script Language-I

A scripting language or script language is a programming language for a runtime system that automates the execution of tasks that would otherwise be performed individually by a human operator.[1] Scripting languages are usually interpreted at runtime rather than compiled.

A scripting language's primitives are usually elementary tasks or API calls[clarification needed], and the scripting language allows them to be combined into more programs. Environments that can be automated through scripting include application software, text editors, web pages, operating system shells, embedded systems, and computer games. A scripting language can be viewed as a domain-specific language for a particular environment; in the case of scripting an application, it is also known as an extension language. Scripting languages are also sometimes referred to as very high-level programming languages, as they sometimes operate at a high level of abstraction, or as control languages, particularly for job control languages on mainframes.

The term scripting language is also used in a wider sense, namely, to refer to dynamic high-level programming languages in general; some are strictly interpreted languages, while others use a form of compilation. In this context, the term script refers to a small.

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