FINAL REPORT OF ACADEMICS:

FUNDAMENTAL NOTIONS OF COLOR AND CONCEPTS:

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.

So why should you care about color theory as an entrepreneur? Why can't you just slap some red on your packaging and be done with it? It worked for Coke, right?

Color theory will help you build your brand. And that will help you get more sales. Let's see how it all works.

People decide whether or not they like a product in 90 seconds or less. 90% of that decision is based solely on color.

Color is perception. Our eyes see

KEY SKILLS:

- Understanding color

- **RGB: the additive color mixing model**
- **CMYK: the subtractive color mixing model**
- The color wheel
- **Color wheel basics**
- **Hue, shade, tint and tone**
- **Color schemes**
- **Complementary colors**
- **Analogous colors**
- **Triadic colors and other concepts.**

IMAGE PROCESSING -1:

Image processing is often viewed as arbitrarily manipulating an image to achieve an aesthetic standard or to support a preferred reality. However, image processing is more accurately defined as a means of translation between the human visual system and digital imaging devices. The human visual system does not perceive the world in the same manner as digital detectors, with display devices imposing additional noise and bandwidth restrictions. Salient differences between the human and

digital detectors will be shown, along with some basic processing steps for achieving translation. Image processing must be approached in a manner consistent with the scientific method so that others may reproduce, and validate, one's results. This includes recording and reporting processing actions, and applying similar treatments to adequate control images.

KEYSKILLS:

- Introduction to photoshop.
- Color modes
- Typographical tools and panels
- Working with layers
- Raster images and resolution
- Configuration of the software.
- Digitization and images capture technologies.
- Import external files
- Selection tools
- Masking tools
- General methodology
- Cropping tools ,lightness and colours adjustments tools
- Blending modes,filters and effects.

- 3d creation tools.
- Saving ,exporting and printing
- Camera raw image creation and modification tools and techniques.
- Image reparation,retouching and coloration tools and techniques.
- Basics of compositing.
- Professional quality project creation and presentation.

ADVANCE IMAGE PROCESSING:

Adobe Photoshop has many advanced image manipulation features, including the ability to manipulate color, use filters, change or create an image's perspective, warping images, and creating 3D images that enable user to create powerful images. Use this activity to introduce your students to some advanced imaged editing techniques to help them design creative, unusual, and stunning images.

KEYSKILLS:

- understand and use Photoshop’s advanced functions;
- use advanced selection techniques;
- use advanced retouching techniques;
- use advanced sport correction techniques;
- use advance color correction techniques;
- create elements in a 3D environment;
- use perpective planes in a vanishing point environment;
- use Photoshop’s audio and video functions;
- use Photoshop automation actions and batch processing scripts;
- create advanced image compositings.
- understand, manage and use smart objects;
- use vector, clipping and layer masks;
- use adjustment layers and their properties;
- use layer syles and effects.
- create compositing using color range selections;
- remove or reduce noise from images;
- make different non-destructive adjustments using Lab mode;
- make selections using the channels.
- create monochrome and duotone images;
- creat multichannels images;

•apply textures to images;
•use history snapshots and history brush tool;
•reshaping silhouettes;
•using content-aware scale;
•using Liquify;
•using Match Color;
•render lights.
create High Dynamic Range (HDR) images;
•using HDR toning;
•using Look-up Tables (LUT) to color grade images;

•create and modify video within Photoshop;
•create animations using stop motion and keyframes;
•using filters and transitions;
•using audio;
•export video and animation.

•use Photoshop’s Vanishing point functions;
•create and modify elements based of perspective planes,
•use and create Photoshop’s Actions scripts;
•using Photoshop’s batch processing functions.
•create 3D text extrusion;
•use Photoshop’s 3D functions;

•create 3D objects from 2D elements;
•adjust 3D elements properties;
•pierce 3D volumes;
•maniipulate 2D objects in a 3D environment.

DEVELOPMENT OF DYNAMIC WEBSITE KEY SKILLS:

Analyze the requirements of a website according to specifications.
•Plan a website as required.
•Recover material needed to complete a website.
•Design the structure of a website.
•Determine the appropriate layout for a website.
•Prepare the images and graphics that will be used on a web page.
•Apply the principles of user-centric design in the development of a website.
•Apply the principles of color and typography in the design of a web page.
•Use the functionalities of the various software and development tools that
facilitate the development of the content of a website.
•Use scripting languages in developing the

interactivity of a Web site.
•Build a complete functional website using the available technologies.

DATA PROCESSING TECHNOLOGIES KEY SKILLS:

•Understanding and creating valid XML documents.
•Identify the types of content used in the elements.
•Create XML elements and attributes.
•Working with XML converters.
•Understanding how Web browsers work with XML.
•Styling XML documents in CSS and XSL
•Parsing and using Document object model to display XML documents
• Understanding and using JSON data structure
•Retrieving data from JSON files
•Retriving exyernal data using AJAX requests
•XML to JSON conversion
•Understanding and using various types of APIs

- Perform the logical organization of data on physical media.

- Perform the logical organization of data in memory.

- Use data on file.
- Harnessing data in memory.

WEB DESIGN AND DEVELOPMENT-1

KEYSKILLS:

WebD2 is an introduction to the design, creation, and maintenance of web pages and websites. learned how to critically evaluate website quality, learn how to create and maintain quality web pages, learn about web design standards and why they're important, and learn to create and manipulate images. The course progresses from introductory work on web design to a culminating project in which students design and develop websites for local community organizations.

UI DESIGN KEYSKILLS:

- UX RESEARCH SKILLS
- WIREFRAMING AND PROTOTYPING
- UX WRITING
- VISUAL COMMUNICATION
- INTERACTION DESIGN
- CODING
- ANALYTICAL
- INFORMATION ARCHITECTURE SKILLS

INTERACTIVE CONTENTS-1 KEYSKILLS:

- Table
- Carousels
- Svg

- Clip path
- Responsive table
- Scrolling
- Complete coding
- Homepages
- Contact pages
- About pages
- Html
- Css
- Javascript

TYPOGRAPHY KEYSKILLS:

- Fonts sizes
- Contrasting colors
- Measuring units

- Alignment
- Leading
- Combining fonts
- White space visualization
- Screen width and typography
- All ancient scripts & fonts
- Use unique fonts and style
- Functionality
- Background
- Font weight
- Pairing multiple fonts.

PAGE LAYOUT FUNDAMENTALS KEYSKILLS:

- Simlarity
- Continuation
- Closure
- Proximity
- Order
- Grids
- Bootstrap
- Hierarchy
- Use boxes
- Utilise white space

- Scale and balance and etc.

FUNDAMENTALS OF PROGRAMMING KEYSKILLS:

- PROFIENCY IN PROGRAMMING LANGUAGES.
- LEARNING CONCEPTS AND APPLYING TO THE OTHER PROBLEMS.
- PROBLEM SOLVING CAPABILITIES
- VARIABLES,SYNTAX,TOOLS.
- CONTROL AND DATA STRUCTURE.
- STRINGS AND MANY MORE.

DIGITAL PHOTOGRAPHY KEYSKILLS:

- HEADSPACE
- MONOCHROME
- NEGATIVE
- Exposure
- Aperture
- Shutter speed
- Iso
- Exposure triangle
- Depth of field
- Focal point

- Sensor size
- Composition,histogram,camera settings and modes.
- Black and white.
- Sharpness
- Landscape
- portrait
- Nightscape
- And more.

INTERACTIVE CONTENTS-2 KEYSKILLS:

- HEADER
- FOOTER
- BOX
- FLEXBOX
- MASKIMAGES
- CLIPPATH
- MANY MORE.

WEB DESIGN &DEVELOPMENT-2 KEY SKILLS:

- Creating
- Developing

- Building websites and applications with tools.

DATA INTEGRATION PROJECT

- DEVELOPING USING VIRTUAL SERVER
- DATA WAREHOUSING TECHNIQUES
- COMPLETE PROJECT USING HTML,CSS AND JAVASCRIPT.

SERVER SIDE TECHNOLOGIES:

- Binary data
- Php
- Data and uploading
- Get and post
- Client-side validation
- Server-side validation
- Empty string and validate string
- Strings,variables
- Global scope variables
- Mathematical operations

MARKETING CONCEPTS:

- Production
- Product
- Selling

- Marketing
- Advertising
- Historical overview of marketing. The marketing-mix. Product and services. Product's life cycle. Consumers and customers. Adoption of innovations process. The customers needs. Factors influencing the customers behaviours. The purchase decision-making process. The markets, audiences and segmentation. Basic marketing strategies. The products life cycle and main associated strategies. Basics of advertising. Issues and consequence of advertising. Advertising communication process. Main streams and types of advertising. Formal and informal elements in advertising. The Ogilvy's method. Organic search engines optimization (SEO). SEO best practices. Using keywords. Importance of HTML structures and usage of HTML5's semantic tags and output elements. How to influence ranking. Web marketing strategies and tools. E-mail campaigns. Inbound marketing. Putting social networks to profits. Influence marketing.

SCRIPTING LANGUAGES 1 & 2 KEY SKILLS:

- BUTTONS

- CAROUSELS
- DOCUMENT READY HANDLER
- Click()
- Dblclick()
- Mouseenter()
- Mouseleave()
- Mousedown()
- Mouseup()
- Hover()
- JQUERY
- ANIMATION,HEAder,footer,toggle,append,remove,empty.
- Slidedown
- Toggleclass
- JSON
- DOM
- Client side scripting
- Server side scripting and etc

DATABASE FUNDAMENTALS SKILLS:

- My sql
- Tables
- Rows
- Columns

- Relationship
- Keys
- Primary key
- Foreign key
- Create ,update,delete ,alter tables.
- Select,insert and drop statements.

AUDIO AND VIDEO TECHNIQUIES SKILLS:

- Adding and video files using html ,css and javascript.
- Sound and video quality methods and process tools.

PORTFOLIO:

- A COMPLETE RESPONSIVE PERSONAL PORTFOLIO WAS BUILT USING HTML,CSS AND JAVASCRIPT.
- WITH BUTTONS,CAROUSELS,SLIDERS,ARTICLES,BOXES
- HOMEPAGE
- ABOUTPAGE
- SKILLS
- EDUCATION

- CONTACT ME PAGE
- SERVICES PAGE
- WITH IMAGES,LOGOS,ICONS,FONTS,LAYOUTS,BACKGROUND IMAGE.
- WITH BARS TO REPRESENT MY SKILLS.
- WITH VARIOUS TAGS (p,div ,section,header,footer,head,body,h1,h2,h3,i ,span and etc ,,etc..).

SUMMARY:

I HAVE LEARNED SO FAR THE ABOVE TOPICS and concepts in the span of two years or 24 months with the help of the subject instructor(suthakar) and CDI institution.It really helped me to have the broad knowledge in developing and designing websites from the front end.I'm really looking forward or am more confident in the field of web design and development to experiment my knowledge and skills in the really world.