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# COMPUTER SCIENCE

WEB DESIGN USING HTML, CSS & JAVASCRIPT





## LEVEL 1 - WEB DESIGN

DURATION - 5 WEEKS (1 TO 2 HRS/WK)

INTRODUCTION TO HTML  
HTML DOCUMENT STRUCTURE  
COMMON ELEMENTS AND ITEMS  
HEADINGS AND ATTRIBUTES  
IMAGE AND MEDIA HANDLING

### SAMPLE PROJECT

- DESIGN A FASHION BLOG WITH IMAGES, TITLES, SUBTITLES AND MORE.

## LEVEL 2 - WEB DESIGN

DURATION - 5 WEEKS (1 TO 2 HRS/WK)

INTRODUCTION TO HTML TABLES  
HOW TO CREATE A TABLE  
TABLE ROWS, DATA, HEADINGS, BORDERS  
SPANNING COLUMNS AND ROWS  
BASIC STYLING WITH CSS

### SAMPLE PROJECT

- DESIGN A FESTIVAL SCHEDULE WITH TABLES TO OUTLINE EVENT SCHEDULES AND ACTIVITIES.



## LEVEL 3 - WEB DESIGN

DURATION - 5 WEEKS (1 TO 2 HRS/WK)

HTML FORMS

TEXT INPUT

ADDING LABELS

PASSWORD, RANGE, CHECKBOX INPUT

SUBMIT FORM

### SAMPLE PROJECT

- MAD LIBS, DESIGN A FORM TO COLLECT USER SPEECH INPUT TO BUILD A GAME.

## LEVEL 4 - WEB DESIGN

DURATION - 5 WEEKS (1 TO 2 HRS/WK)

FIGURES AND FIGURE CAPTIONS

EMBEDDED MEDIA

SECTION AND ARTICLE TAGS

HEADER AND FOOTERS

NAVIGATION TAGS

### SAMPLE PROJECT

- DESIGN A NEW YORK CITY WEBPAGE THAT USES SEMANTIC HTML TO KEEP IT VISUALLY ORGANIZED.

# LEVEL 5 - WEB DESIGN

DURATION - 5 WEEKS (1 TO 2 HRS/WK)

INTRO TO CSS

CSS RULESET VS INLINE STYLE

INTERNAL STYLESHEET AND EXTERNAL STYLESHEET

LINKING CSS FILE

TYPE, UNIVERSAL, CLASS, ID, ATTRIBUTE, SPECIFICITY

FONT FAMILY, FONT SIZE, FONT WEIGHT

TEXT ALIGN, COLOR, BACKGROUND COLOR

OPACITY, BACKGROUND IMAGE, IMPORTANT

## SAMPLE PROJECTS

- DESIGN A RECIPE SITE WITH A CSS TO STYLE THE PAGE.
- DESIGN A PHOTOGRAPHY PORTFOLIO SITE WITH CSS TO IMPROVE APPEARANCE.

# LEVEL 6 - WEB DESIGN

DURATION - 5 WEEKS (1 TO 2 HRS/WK)

BOX HEIGHT AND WIDTH

BORDERS, BORDER RADIUS, PADDING, PADDING SHORTHAND, MARGIN

MARGIN COLLAPSE, AUTO, MIN/MAX HEIGHT AND WIDTH, OVERFLOW

POSITION, RELATIVE/ABSOLUTE/FIXED/STICKY, Z-INDEX, INLINE DISPLAY

DISPLAY BLOCK/INLINE-BLOCK, FLOAT, CLEAR

## SAMPLE PROJECTS

- DESIGN A RESTAURANT SITE WITH MENU AND NUTRITIONAL FACTS
- DESIGN CORPORATE SITE FOR A DESIGN FIRM

## LEVEL 7 - WEB DESIGN

DURATION - 5 WEEKS (1 TO 2 HRS/WK)

INTRO TO JAVASCRIPT  
VARIABLES, IF STATEMENTS  
FUNCTIONS AND SCOPE  
ARRAYS

### SAMPLE PROJECTS

- DESIGN AN INTERACTIVE ROCK, PAPER, SCISSORS GAME
- DESIGN A DIGITAL MAGIC EIGHT BALL GAME

## LEVEL 8 - WEB DESIGN

DURATION - 7 WEEKS (1 TO 2 HRS/WK)

WHILE AND FOR LOOPS  
DOM COMMANDS  
FUNCTIONS ASSIGNED TO VARIABLES  
CALLBACK FUNCTIONS  
REDUCE, FOREACH, FILTER AND MAP FUNCTIONS  
OBJECTS NAMING PROPERTIES  
DOT NOTATION  
OBJECTS AS ARGUMENTS  
OBJECT METHODS  
"THIS" KEYWORD  
GET AND SET METHODS

### SAMPLE PROJECTS

- DESIGN AN ADVENTURE GAME TO TRAVEL THROUGH A MAZE TO DISCOVER ITEMS AND AVOID THE MONSTER.
- CREATE AN INTERACTIVE QUIZ GAME WEBSITE.

# TECHNOLOGY REQUIREMENTS

DESKTOP, LAPTOP OR CHROMEBOOK WITH MICROPHONE AND SPEAKER (CAMERA IS OPTIONAL)

MOUSE FOR EFFICIENT BROWSING

UPDATED WEB BROWSER (EXAMPLE; CHROME, FIREFOX, OR SAFARI)

HIGH-SPEED INTERNET CONNECTION

A PROJECTOR OR SMARTBOARD IN THE CLASSROOM

HEADPHONES ARE RECOMMENDED FOR THE STUDENTS TO EFFECTIVELY COMMUNICATE WITH TEACHERS IN ONLINE CLASSROOMS.

ACCESS TO [HTTPS://PORTAL.CODEWITHUS.COM](https://portal.codewithus.com)

\*THE CLASSES ARE LECTURE STYLE, COMPLETION TIME MAY VARY BASED ON LEARNING PACE AND PRIOR KNOWLEDGE.