# Introduction to UI Design & Front End Development

Nature of the course: Theory + Practical

Total hours per day: 2 hours

Course duration: 3 weeks

#### Course Summary

This course is for anyone who would like to learn how to build a website, as well as how to construct mockups and prototypes for mobile apps and websites. This course has been created with high school and university students in mind who wish to undertake coursework, along with anyone with a basic understanding of online sites and pages. By the end of the session, students will have an understanding on how to build a website employing HTML, CSS and JavaScript.

## Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

- 1. Has attended 90% of all classes held
- 2. Has received an average grade of 80% on all assignments
- 3. Has received an average of 60% in assessments
- 4. The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

## Required Text Books

- 1. Front-End Web Development: The Big Nerd Ranch Guide
- 2. JavaScript: The Good Parts
- 3. HTML & CSS
- 4. JavaScript: The Definitive Guide

#### Course Details

#### WEEK 1

## **Understanding & Applying Design Fundamentals**

- What is UI Design?
- UI vs UX Design
- UI Design vs Front End Developer
- Designing and Prototyping UI's
- Design Fundamentals
- Color & Contrast
- White Space
- Visual Hierarchy

- Complexity vs Simplicity
- Consistency
- Scale

# **Figma**

- Introduction
- Learning Figma Interface
- Setting up a new project
- Adding and Editing Content
- Completing the Design
- Exporting, Sharing, and Prototyping
- Working with clients

# **Front End Development**

- What is Front End Development?
- Code Editors

### WEEK 2

### **HTML**

- Introduction
- HTML Elements
- HTML Attributes
- HTML Headings
- HTML Paragraphs
- HTML Styles
- HTML Formatting
- HTML Quotation
- HTML Comments
- HTML Colors
- HTML Links
- HTML Images
- HTML Tables
- HTML Lists
- HTML Block & Inline
- HTML Responsive
- HTML Forms

## **CSS**

- Introduction
- CSS Rulesets
- CSS Selectors
- CSS Declarations
- CSS Values
- CSS Units
- CSS Relative Units
- CSS Box Models
- CSS Functions
- CSS Animations
- CSS Media Queries
- CSS Library

## WEEK 3

## **JavaScript**

- What is JavaScript?
- JavaScript Stats
- What can JavaScript do?
- JavaScript Framework
- Top Websites Built Using JavaScript
- Benefits of JavaScript
- JavaScript Fundamentals
- JavaScript Variables
- JavaScript Constants
- JavaScript Data Types
- JavaScript Objects
- JavaScript Functions
- JavaScript Conditional Statements
- JavaScript Loops
- JavaScript Switch Case

## **Learning Outcomes**

- Design Websites
- Mobile and Web App Mockup & Prototype in Figma
- Responsive Web Design using HTML, CSS and JS