# CMPS 356 Enterprise Application Development
# Lab 2 – CSS Fundamentals

## Objective

By the end of the lab you should be able to:

- ✓ Add internal and external **CSS styles** to your HTML pages.
- ✓ Differentiate and use important CSS **selectors, properties and values.**
- ✓ Use colours and images to style your pages.
- ✓ Explain and use the box model to style **margins** and **paddings**
- ✓ Use the grid layout and media quries and develop responsive web page layouts and forms.

## Overview

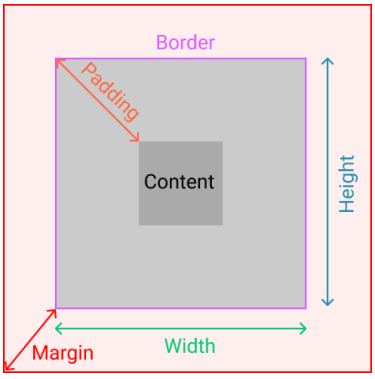
This lab has 4 parts:

- **In Part A**, you will use vanilla CSS to style elements on a web page.
- **In PART B**, you will use the grid layout to position elements on a web page.
- **In PART C**, you will develop a responsive page layout using grid and media queries system.
- **In PART C ,** you develop a complete website using the concepts that you practiced in part A,B and C

First sync your cmps356 repository using **GitHub Desktop** Client. Create a subfolder named "**Lab2-CSS**" inside the local working folder of your repository. You need to place your work in **Lab2-CSS** folder. At the end of the Lab, complete the testing document then sync your repo to push your work to GitHub.

## Part A – Basic CSS -Tutorial

1. Get the Lab2-CSS repo from github and copy it to your private repository
2. Open the **Lab2-CSS** folder using **Webstorm**.
3. The folder contains four files [ **index.hml** , **grid-layout.hml**, **forms.html**
4. Create styles.css file under a folder named "css" inside Lab2-CSS folder. We will be using these files to practice the following concepts .
    a. Linking style sheet to your html page ( Internal Stylesheet, External Stylesheet, Cascading Order ,Inline )
    b. CSS-Syntax [selector {Property : value}]
        i. Inheritance
        ii. Combining Selectors [h1,h2,p]
        iii. Comment tags
    c. How to use divs , span , classes , IDs in CSS
    d. Border, Margins , Padding and the box model



e. Text Properties (Colors, Letter Spacing, Text Align, Text Decoration ,Word Space)
f. Font [Font-family , font-size, font-style, font-weight]
g. Pseudo Classes a:link , visited , hover , focus , active
h. Background [attachment , color , image , position , repeat]
i. Border [color , style , width]
j. Clip (auto , shape)
k. Display
    i. Block , inline , list-item , none , grid
l. Overflow (auto, hidden , visible , scroll)

You can use the following links to further practice

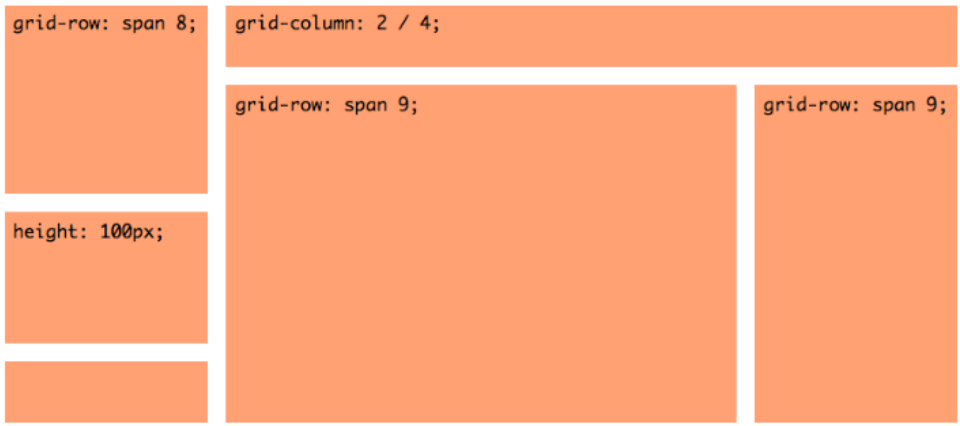
➔https://www.w3schools.com/css/default.asp
➔ https://htmlcheatsheet.com/css/

## Part B –CSS Grid -Tutorial

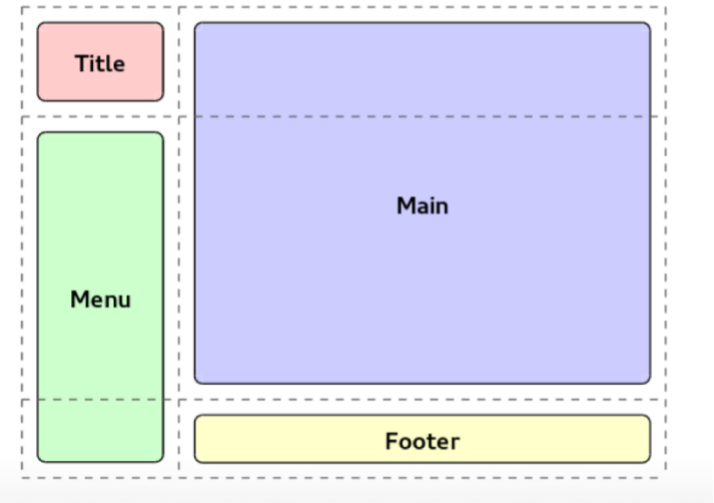
The CSS grid is one of the most powerful css layout system that allow us to position elements in both directions.

**Review** : Grid Layout (container , column , row , nested grid , aligning and justifying items . You will find here a cheat sheet for grid layout : http://grid.malven.co

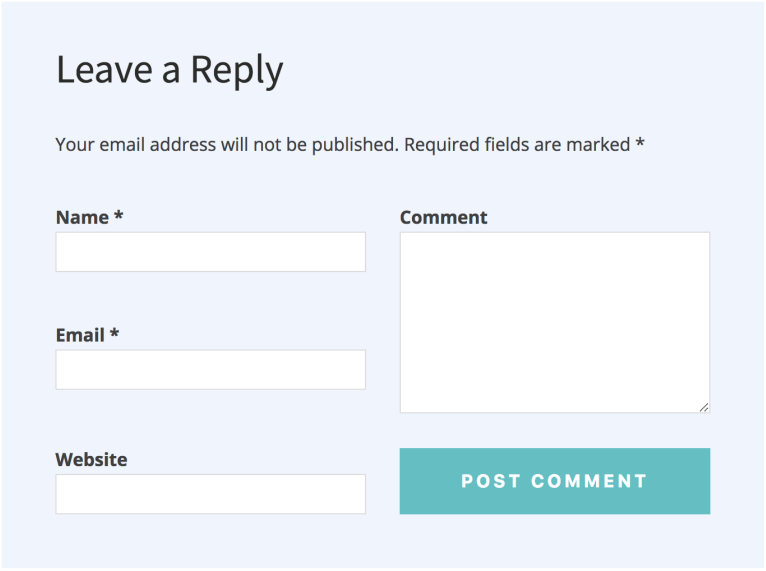
Exe1: Apply the concepts we reviewed and try to create a grid layout that resembles following layouts



Ex. 2



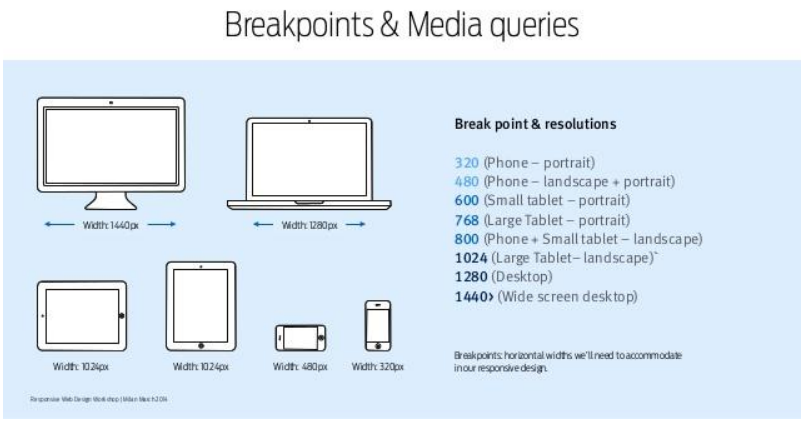

Ex3. Using Grid Create the following form



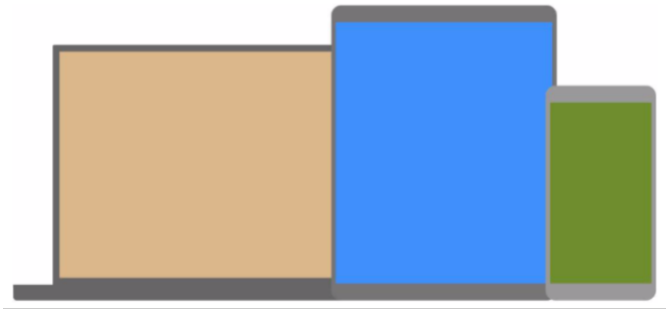

## Part C – Responsive web design using Grid and Media Queries

Media queries help us detect different screen sizes and allow us to adopt our layouts accordingly. In the following we will see how we can utilize them to make our website responsive.

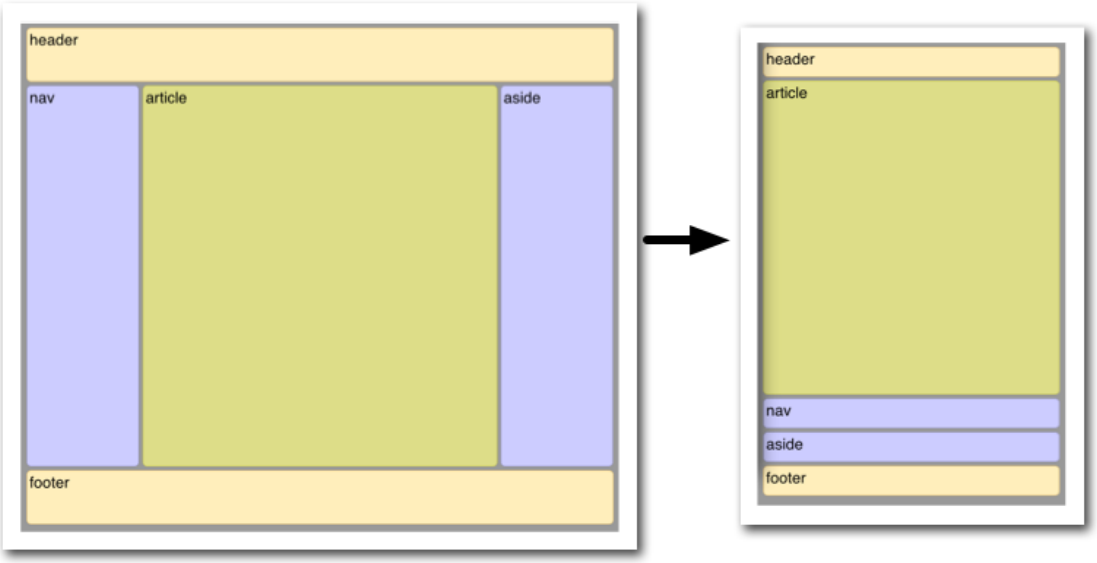
Media Queries - `@media screen and (max-width: 992px)`




Ex1: Using the above break points try to change the background of the screen.



Ex.2 Using Grid layout and Media Query try to create the following responsive layout. Screens with size

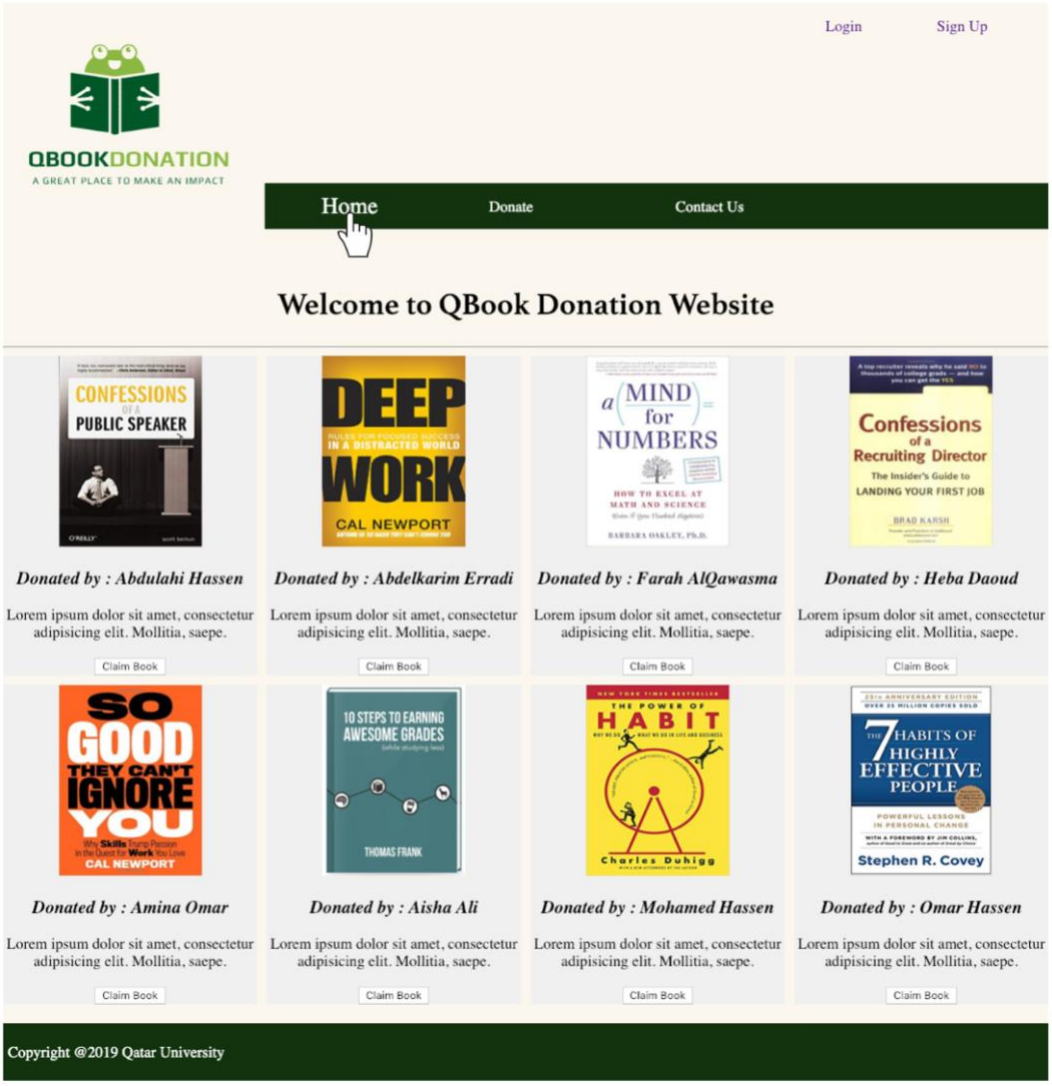


# Part D – QU Book Donation

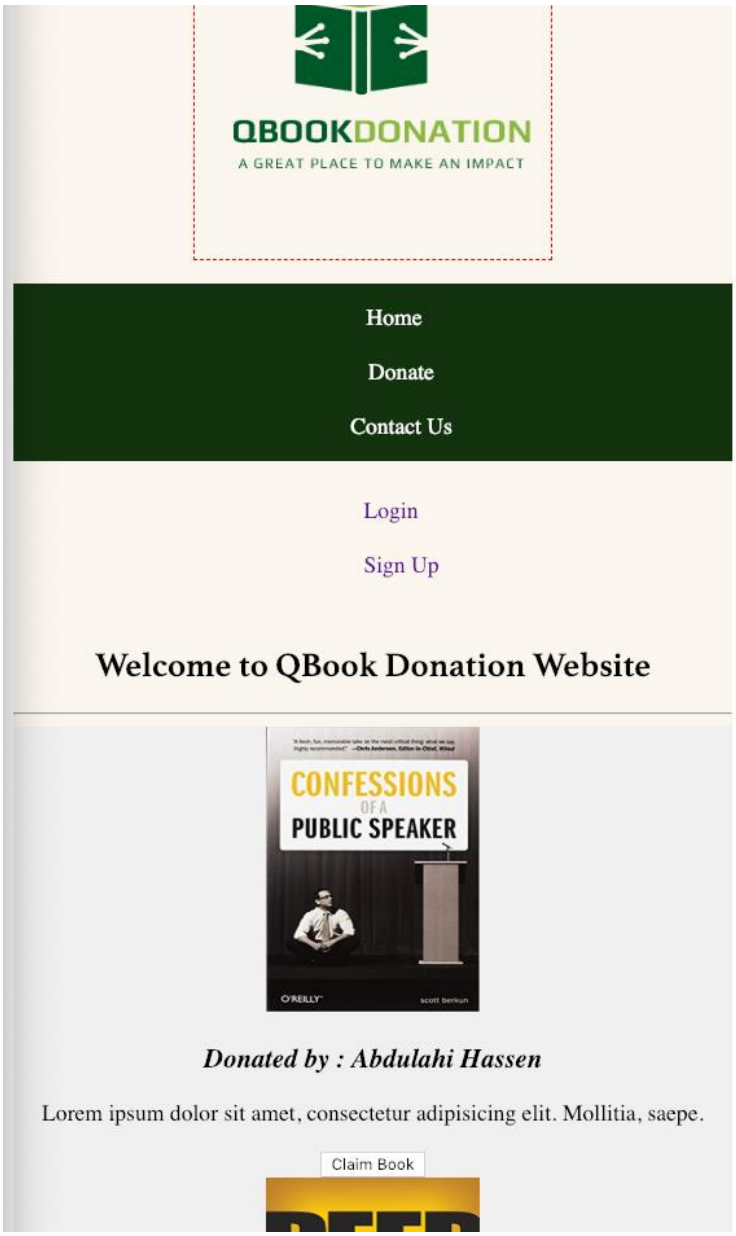
## Deadline Next Week Day before the Lab

1. Create a project named QBook Donation
2. Create the following pages
    a. Home
    b. Donate
    c. Contact Us
    d. Login
    e. Sign Up
3. All the pages should resemble the images shown
4. You should use grid and media queries to achieve the described layouts

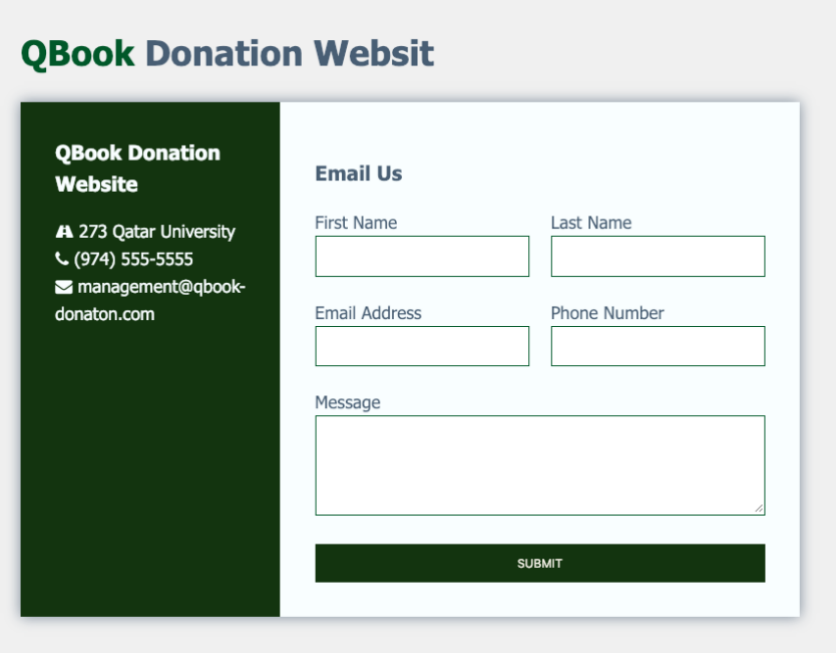
**Home Page on Bigger Devices**



## Home Page on Smaller Devices



**Contact Us Page**




For other two pages [ **Login and Donation**], you are free to come up with your own design. However, make sure you use grids to layout your elements and the donation page should have the following elements but the design should be much better than this.


After you complete the lab:

1. Fill in the ***Lab2-TestingDoc-Grading-Sheet.docx*** and save it inside ***Lab2-CSS*** folder
2. Sync your repository to push your work to Github.