MOAT ACADEMY
WEB APPLICATION DEVELOPMENT TRAINING

CSS Positioning and Practical Applications – Day 4

CSS GRADIENT
PROPERTY

CSS GRADIENT

In place of background image, CSS gradients let you display smooth transitions between two or more specified colors.

CSS defines three types of gradients:

- Linear Gradients (goes down/up/left/right/diagonally)

- Radial Gradients (defined by their center)

- Conic Gradients

CSS **LINEAR** GRADIENT

To create a linear gradient you must define at least two color stops. Color stops are the colors you want to render smooth transitions among. You can also set a starting point and a direction (or an angle) along with the gradient effect.

Syntax:

background: linear-gradient(*direction*, *color-stop1*, *color-stop2*, …);

background: radial-gradient(shape, color1 N%, color2 Y%,…)

Example:

#grad {

 background: linear-gradient(to right, red , yellow); /*left to right*/

}

background: linear-gradient(to bottom right, red, yellow); /*diagonal*/

background: linear-gradient(45deg, red, yellow); /*angle*/ (may be –ve)

background: linear-gradient(to right, rgba(255,0,0,0), rgba(255,0,0,1)); /*transparent colors*/

background: radial-gradient(circle | ellipse, red, blue, yellow);

See Facebook background: a solid blue div on top of a blue div, near gradient can be used to achieve the blue bg, near-gradient(to top, blue, ...)

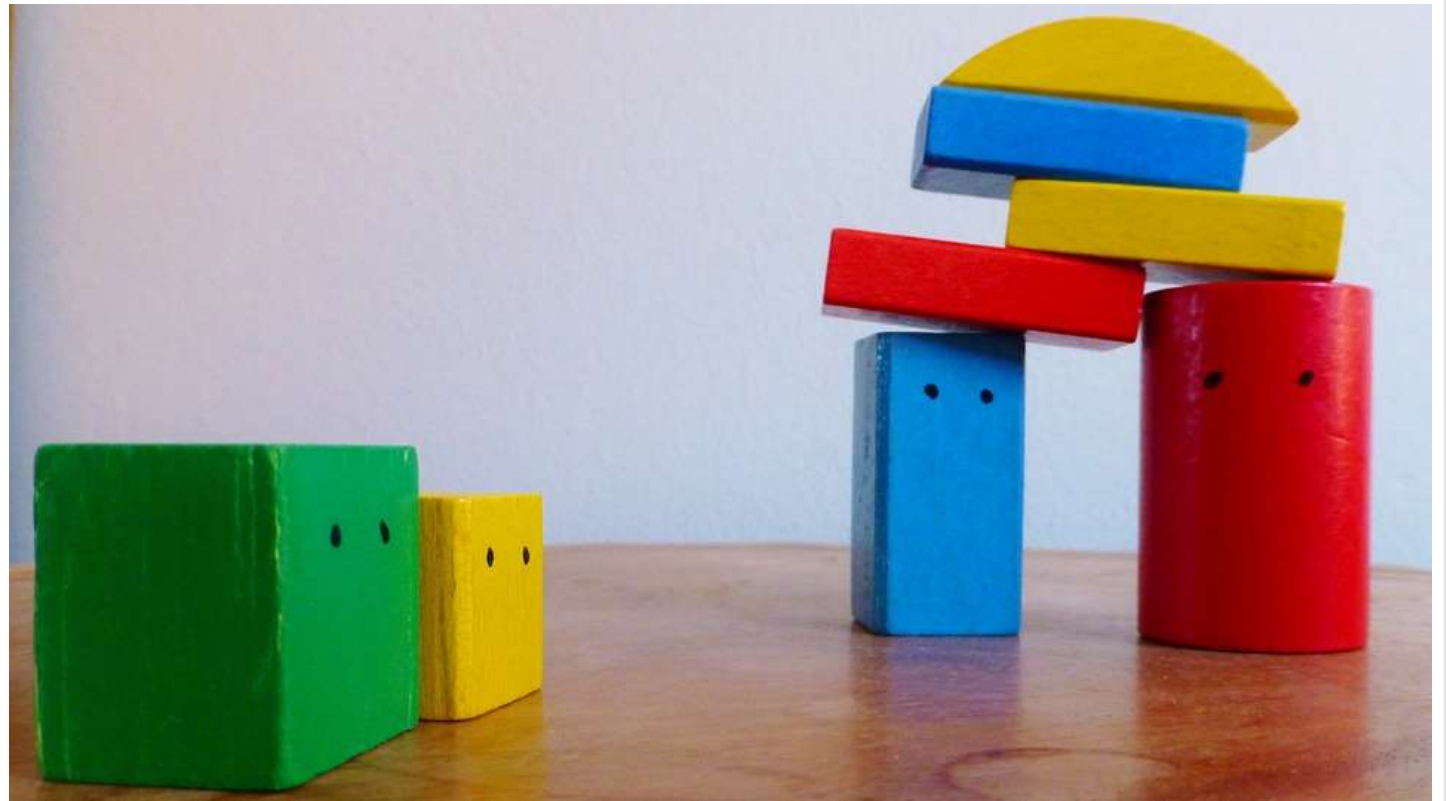# Other Applications of Linear Gradient: Adding gradient on top of a background image

- To add a semi opaque/semi transparent colour gradient that goes on top of the background image, you need not introduce a second div. Simply add linear gradient to the same div carrying the background image as follows:

- A simpler method is to use background image with gradient.

```
#banner{

	background-image:

	linear-gradient(to bottom,

rgba(0,0,0, 0.52), rgba(10,10,30,

0.73)),url('banner.jpg');

	height: 300px;

	background-size: cover;

}
```
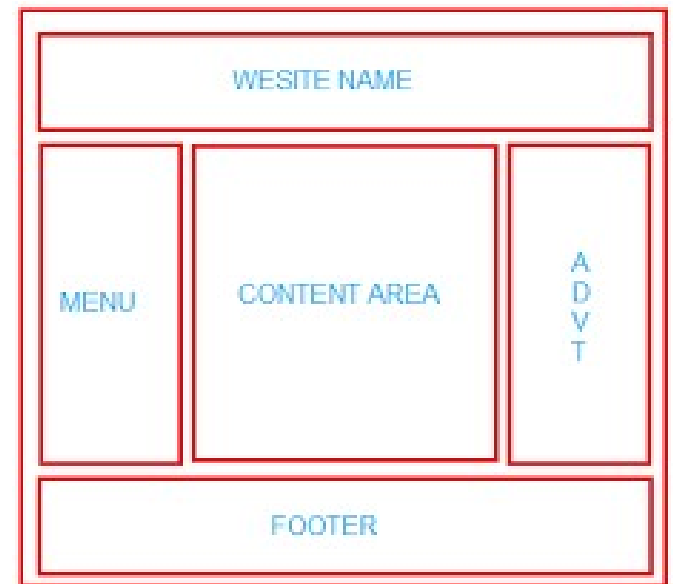
CSS DIV and Other Semantic Elements

Elements whose functions are *self-explanatory*

CSS DIV

CSS DIV

- **Consider the layout shown:**

- The boxes, just like *lego* blocks can be put together to form a complete website.

- The parents of boxes which sit side by side are **flex'ed.**

- This layout is also known as the wireframe for your website.

- It is a good idea to use meaningful names for your classes and id"s for **better SEO**
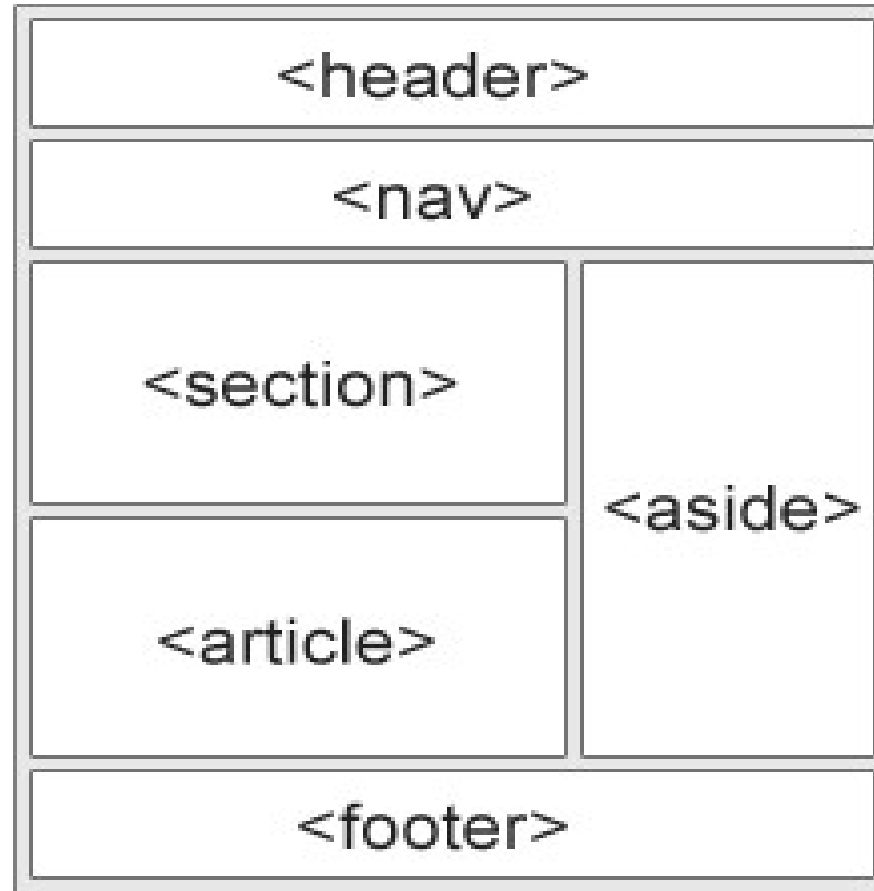
Semantic Elements

- The div is a generic block-level element that can be used to group web contents

- A semantic element describes its meaning to both the browser and the developer. They describe the structure of a web document in a standard way thus making browsers and assistive technologies understand the page better.

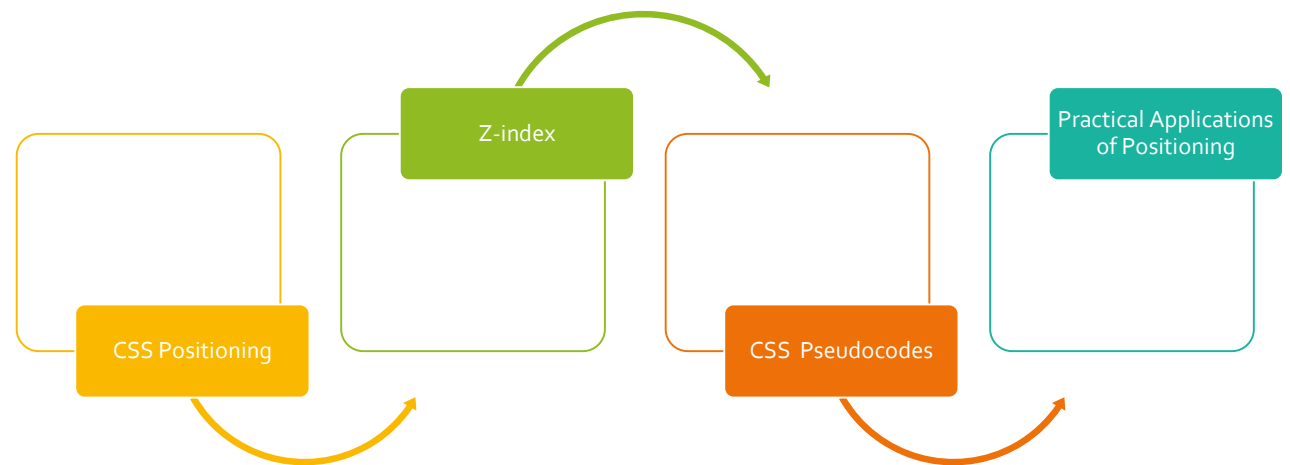|	
HTML Navigational Element (<nav>)	**defines a section that contains navigation links that appear often on a site. You can have primary and secondary menus, but you never nest, or put a <nav> element inside a <nav> element.**
HTML Article Element (<article>)	defines a piece of self-contained content. It does not refer to the main content alone and can be used for comments and widgets.
HTML Section Element (<section>)	defines a section of a document to indicate a related grouping of semantic meaning.
NOTE: Articles can be nested inside of sections and sections can be nested inside of articles.	
HTML Aside Element (<aside>)	defines a section that, though related to the main element, but has a different placement than the main content , like an explanation box, definition or an advertisement. It has its own outline, but doesn't belong to the main one. The <aside> element is often used for sidebars containing extra, but relevant, information
HTML Header Element (<header>)	defines the part of a page which typically contains the logo, title, and navigation. The header can also be used in other semantic elements such as <article> or <section> — or section header, containing perhaps the section's heading, author name, etc. <article>, <section>, <aside>, and <nav> can have their own <header>. Despite its name, it is not necessarily positioned at the beginning of the page or section.
HTML Footer Element (<footer>)	defines a page footer which typically contains the copyright, legal notices and sometimes some links — or section footer, containing perhaps the section's publication date, license information, etc. <article>, <section>, <aside>, and <nav> can have their own <footer>. Despite its name, it is not necessarily positioned at the end of the page or section.
HTML Blockquote	Indicates that the enclosed text is an extended quotation.

Semantic Elements

Designing for older browsers

- Unknown elements are styled as display: inline by default, so you'll want to set them to display: block:

- See example:

```
article, aside, footer, header, nav, section {
  display: block;
}
```

CLASS
OUTLINE

CSS Positioning

Z-index

CSS Pseudocodes

Practical Applications of Positioning

CSS POSITIONING

Positioning rules

- Sometimes you just want an element to appear at a particular distance from the edges.

- You can then specify to the elements where on the page they should appear. (`top, bottom, left,` or `right`)

- But first, you determine the kind of positioning rule the element(s) should obey through the positioning property**

- This specifies how the elements of the webpage should be placed, values may be `fixed, static, relative, absolute` or `sticky`
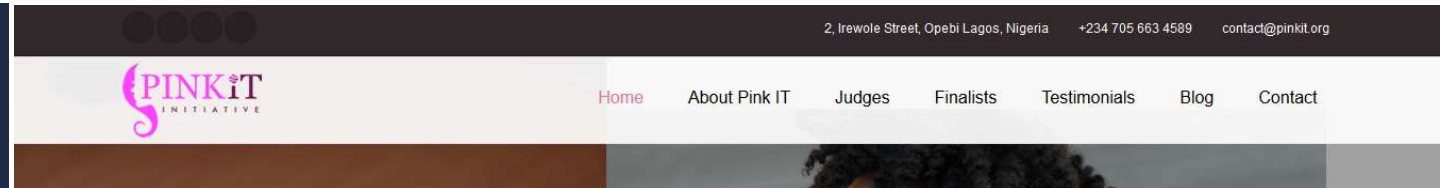
Setting the Positioning

- **Static** : This is the default, if an element is not positioned explicitly, then its statically positioned.

- **Relative**: relative to its "normal" position, other contents will not take any gap left by it.

- **Fixed**: relative to the viewport, which means it always stays in the same place even if the page is scrolled. Does not leave gap in the page where it would have been created.

- **Absolute**: positioned relative to the nearest positioned parent, if no parent, uses the body

Sticky Positioning

- A stickily positioned element is treated as relatively positioned until it crosses a specified threshold, at which point it is treated as fixed until it reaches the boundary of its parent.

- Sticky positioning can be thought of as a hybrid of relative and fixed positioning.

- You must specify a threshold* with at least one of top, right, bottom, or left for sticky positioning to behave as expected. Otherwise, it will be indistinguishable from relative positioning.
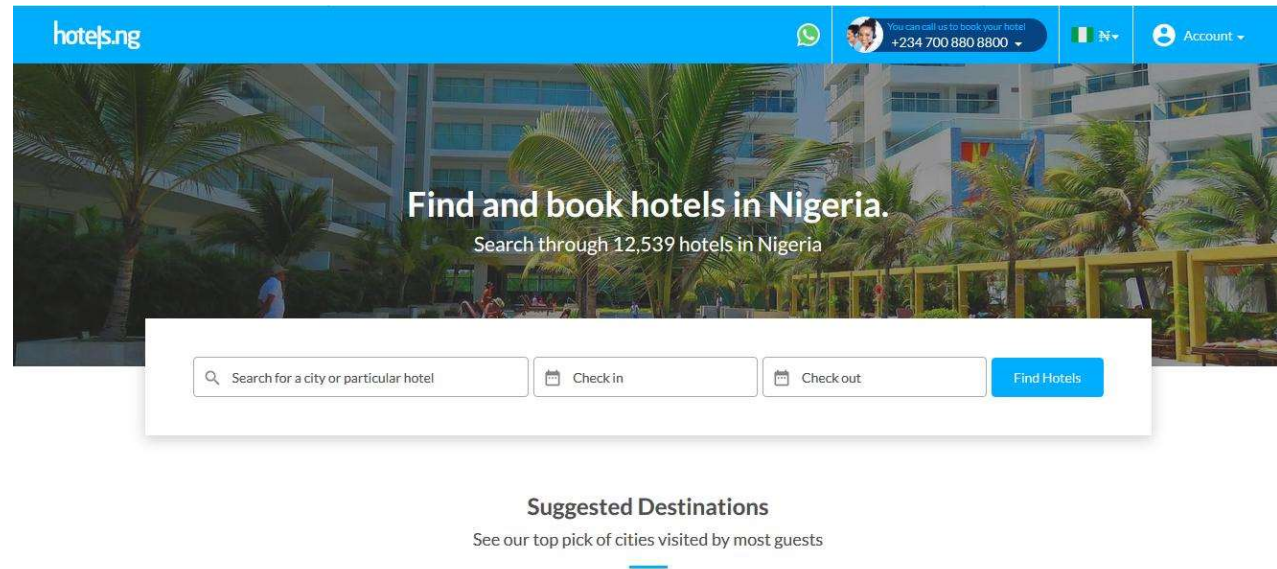
```
#one { position: sticky; top: 10px; }
```
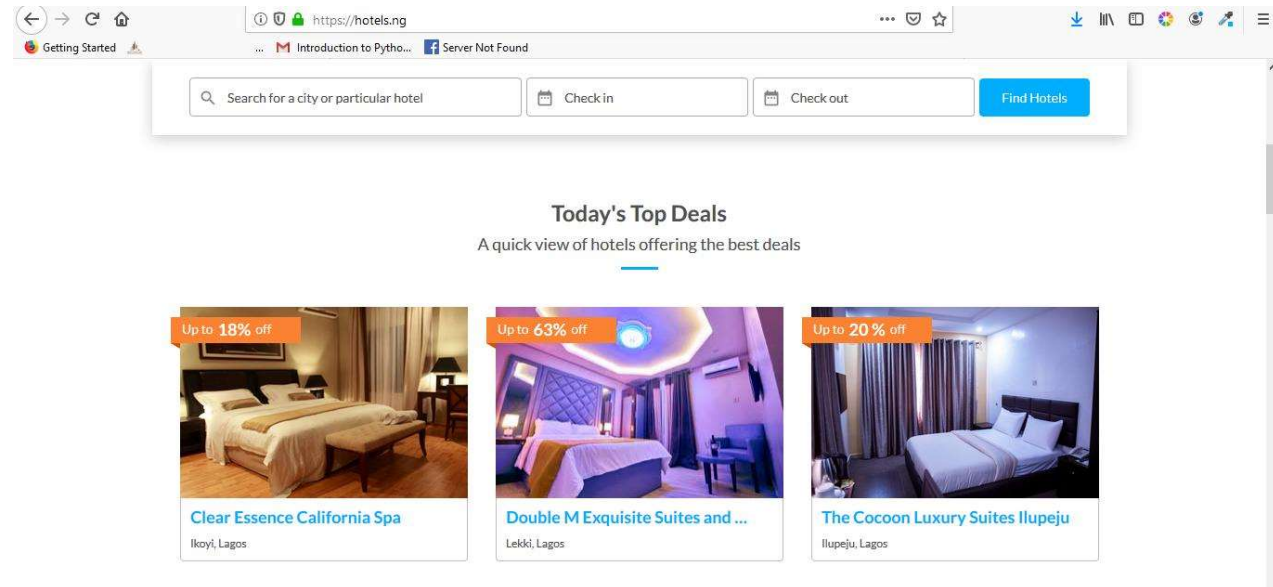
Sticky Positioning in Practice

Notice the black background before the sticky menu, it ensures that we scroll the page up to the point specified before the menu becomes fixed

Sticky Positioning in Practice

Notice that the search box is at some distance from the top of the page

Sticky Positioning in Practice

On scrolling the page, when the search box gets to a distance of 0p from the top From the viewport, it becomes fixed
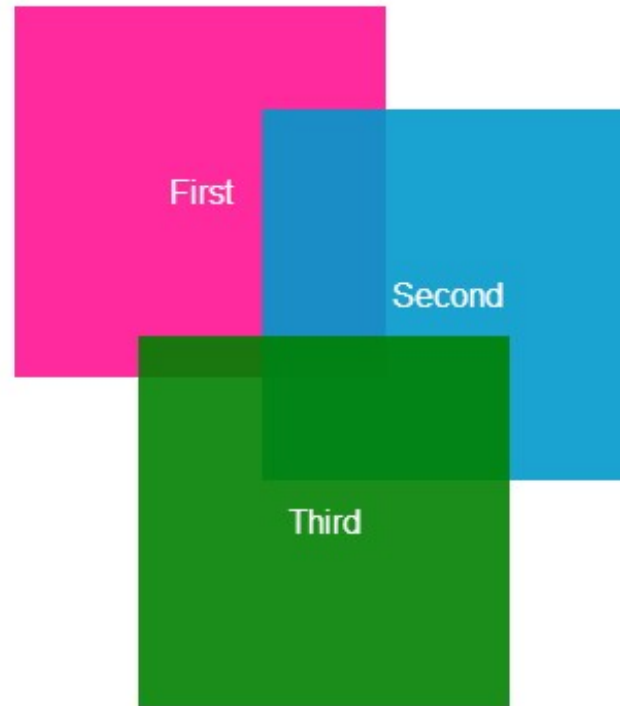
Notes on Positioning

- If both top and bottom are specified (technically, not auto), top wins.

- If both left and right are specified, left wins when direction is ltr (English, horizontal Japanese, etc.) and right wins when direction is rtl (Persian, Arabic, Hebrew, etc.)

The z-index

- Specifies the stack order of an element (when placed on top of each other)

- ! Remember that an element is placed on top of each other by positioning them so

- An element can have negative or positive z-index value.

- The element with a **higher z-index comes on top of the others**

- The element must be positioned before it can respond to z-index;

- Practical Application: Drop-down menu.

Achieve the stack shown using positioning:
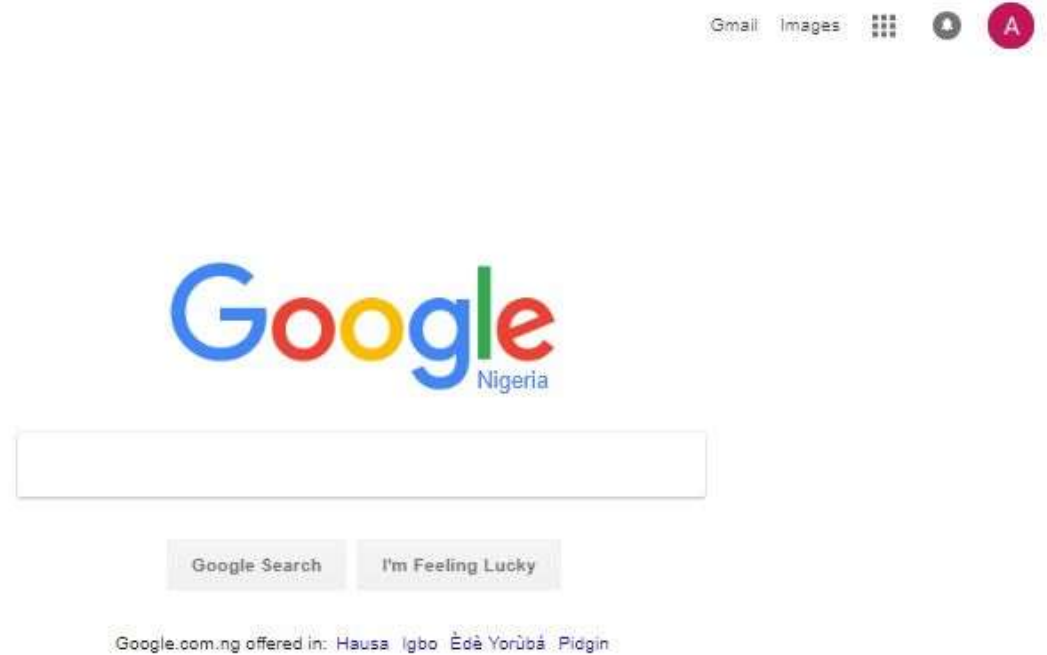Hint: z-index, positioning

Hint: Position the elements such that they almost appear in the same location. Then use z-index to arrange them, baby pink: rgb(244,194,194)
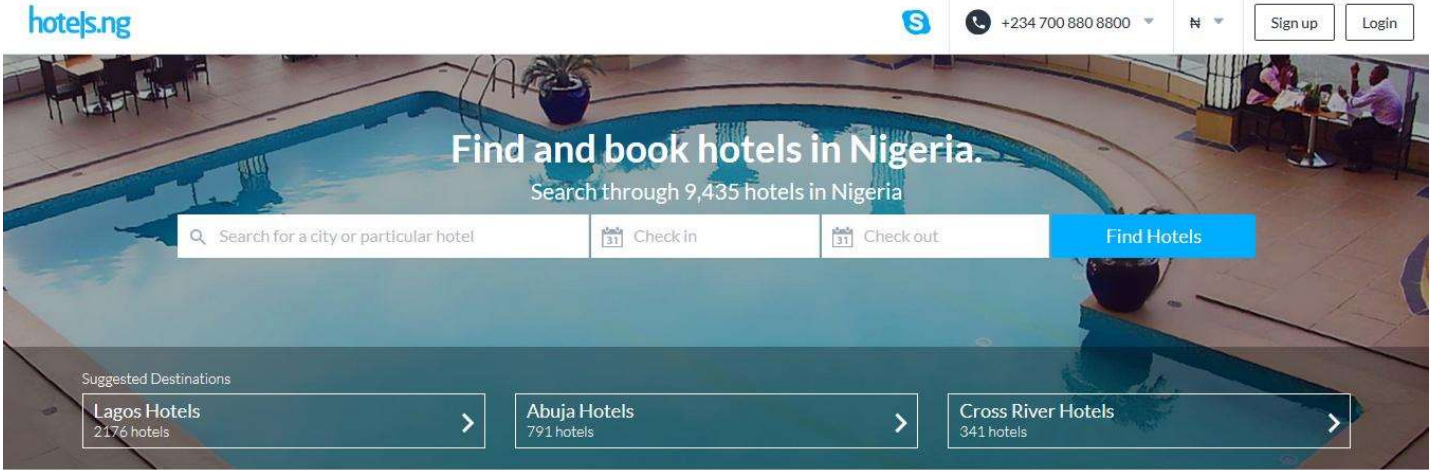
HANDSON

Assignment:
Google Interface

Search Bar with Background

Fixed Social Media Side Bar

Fixed Navigation : "Go To Top" as seen on Moat Academy Website

Featured Participants' Bootcamp Projects

We adopted project-based learning. Here are some applications developed by our participants during the programme:

Foodie by Praise

An online ordering application where a food vendor/ restaurant can display their menu; allowing their prospective customers to place order
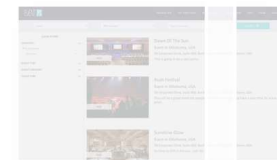
MyPayView by Kenneth

An escrow service that collects, holds, and disburses funds when both a buyer and the seller

Techstack by Chima

TechStack is an online marketplace with a difference; users can sell, buy and **rent tech gadgets** from one another

EventPS by Toluwalakin

a one-stop shop for event planners, where they can search for listed venues and listed vendors. Also,

The LiveChat Icon is not moving with the page as it scrolls…

Why Choose WhoGoHost?

Over the years, 40,000+ companies and institutions have
trusted us to deliver excellent services

Let's Chat

West Africa's No. 1 Hosting   Wide Range Of Offerings   24/7 Customer Support

The social media div is not moving with the page as it scrolls…

Education and Training

Grow your knowledge. Boost your skills. Learn from the experts any time, where or way you choose.

ON DEMAND WEBINARS>

TRAINING WEEKS>

ISACA CONFERENCES>

VIRTUAL TRAINING>

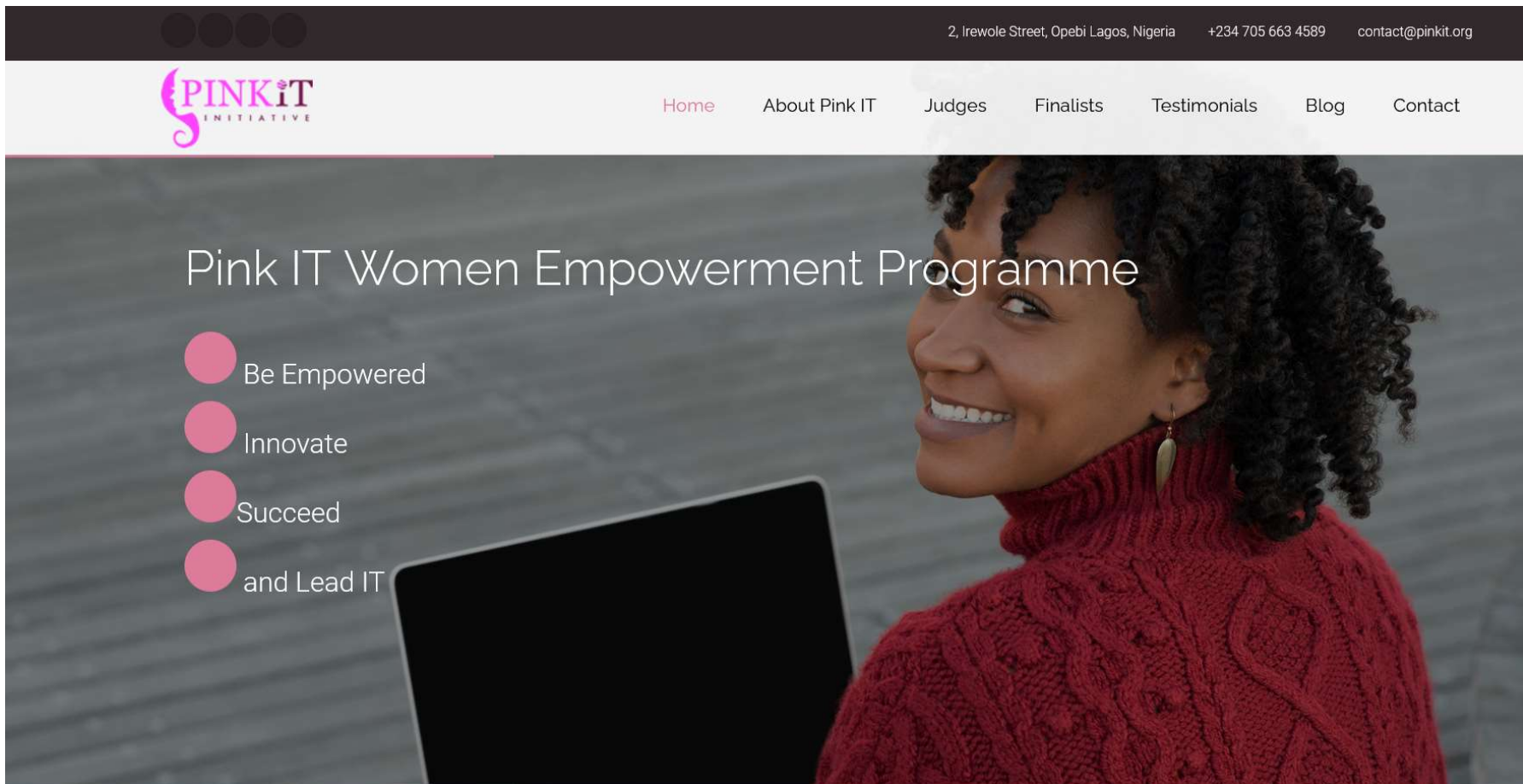**EXAM PREP BY ISACA>**

ONLINE EVENTS>

EDUCATE YOURSELF

Collapsible Header

Application is Now on for Our Next Batch of Training.

ASSIGNMENT: Replicate something similar to the banner below: Let the menu be stick'ily positioned, set height of the body to 1000px to achieve scrolling

Catch up with all outstanding!

Start by doing what's necessary, then what's possible, and suddenly you are doing the impossible. ~ Francis of Assisi