

HTML and CSS Crash Course

① Introduction

HTML → Hypertext Markup Language

CSS → Cascading Style Sheet

* What is HTML?

⇒ Used to structure content on a web page
(images, text, forms etc)

* What is CSS?

⇒ Works alongside HTML.

⇒ Used to style web pages to make them look better.

↳ Change colours, position, effects, font size etc.

index.html

default home page file name

⇒ Basic Structure of an HTML Page:

<!DOCTYPE html>

<html>

<head>

-- -- --
</head>

<body>

-- -- --
</body>

</html>

Extra information about
the website.

This is the stuff that actually
gets rendered to the browser.

* Inside <head> tag

⇒ <title> tag.

↳ This will be displayed on the tab.

* Inside <body> tag

<p>

↳ Paragraph tag.

②

HTML Basics

** tag**

→ Text inside this tag becomes bold.

** tag**

→ Text inside it become italic.

<small> tag

→ Text inside it becomes small.

* Heading tags

⇒ 6 different heading tags:

<h1> <h2> <h3> <h4> <h5> <h6>

↑

biggest

↑

smallest

* Unordered list

 First

 Second



- First
- Second

* Ordered list

 First

 Second

→ 1. First

2. Second

<div> tag

- divide the content into different groups
- No visual effect, comes in hardly letter when using CSS.
- Since the release of HTML5, this tag not needed as much now.

 tag

- A way to add a CSS or javascript hook into a part of text on HTML.

 tag

- Only opening tag,
- It breaks the line.

 tag

- Only opening tag
- It adds horizontal lines

 tag

-
- adds image

``

{location of
img file}

{description of
image}

`<a> tag`

→ anchor tag {link to other webpage}
→ ` --- `

`<blockquote> tag`

→ For quotation and citing the quote.

`<blockquote cite="...>`

`</blockquote>`

→ Output will be indented.

③

HTML Forms

`<form>`

`<input type="text" id="username">`

`</form>`

{Empty input text field}

`<label for="username"> Enter username: </label>`

`<input type="text" id="username">`



Enter username:

★ Input types

- ① text
- ② email
- ③ password
- ④ radio

```
<input type="radio" name="gender" value="male">  
Male <br>  
<input type="radio" name="gender" value="female">  
Female <br>  
<input type="radio" name="gender" value="Other">  
Other
```

- Male
- Female
- Other

You can Select any
one of these.

★ <Select> tag

```
<Select name="question" id="question">  
    <option value="q1"> Who are you? </option>  
    <option value="q2"> Where are you? </option>  
</Select>
```

{Creates a drop down menu with}
the following questions }

* <textarea> tag

<textarea name="bio" id="bio" cols="30" rows="10"
placeholder="about you...></textarea>

A hand-drawn diagram of a large rectangular text input field. Inside the field, the placeholder text "about you..." is written in cursive.

about you...

about you...

about you...

{Bigger input text field}

* Submit input type

<input type="submit" value="Submit the form">

On clicking form will be submitted.

required attribute

→ makes sure form is not submitted when that field is not filled.

④

CSS Basics

Style sheet

→ A list of CSS rules / rule sets.

Selectors

{Are things we actually
want to target on a
web page}

```
div {  
    color: red;  
    margin: 20px;
```

Declarations

{List of Key-value
pairs.}

{This makes up a single rule}

⇒ linking to a stylesheet from html document.

→ On side head add

```
<link rel="stylesheet" href="styles.css">
```

* Different declaration

- ① color
- ② background-color
- ③ font-size
- ④ text-decoration
- ⑤ font-family
- ⑥ text-align
- ⑦ line-height
- ⑧ letter-spacing
- ⑨ column-count
- ⑩ column-gap
- ⑪ border-width
- ⑫ border-style
- ⑬ border-color
- ⑭ border
- ⑮ border-bottom
- ⑯ border-left
- ⑰ list-style-type
- ⑱ text-shadow
- ⑲ display
- ⑳ Margin
- ㉑ Padding

Inline Elements

Block level Elements

→ Don't take up any more room than their content needs.

→ Span, img, strong, em, a, and more.

Take up the whole width of the page ← regardless of content.

p, div, h₂, h₃, ul, li and more ←

Relative positioning

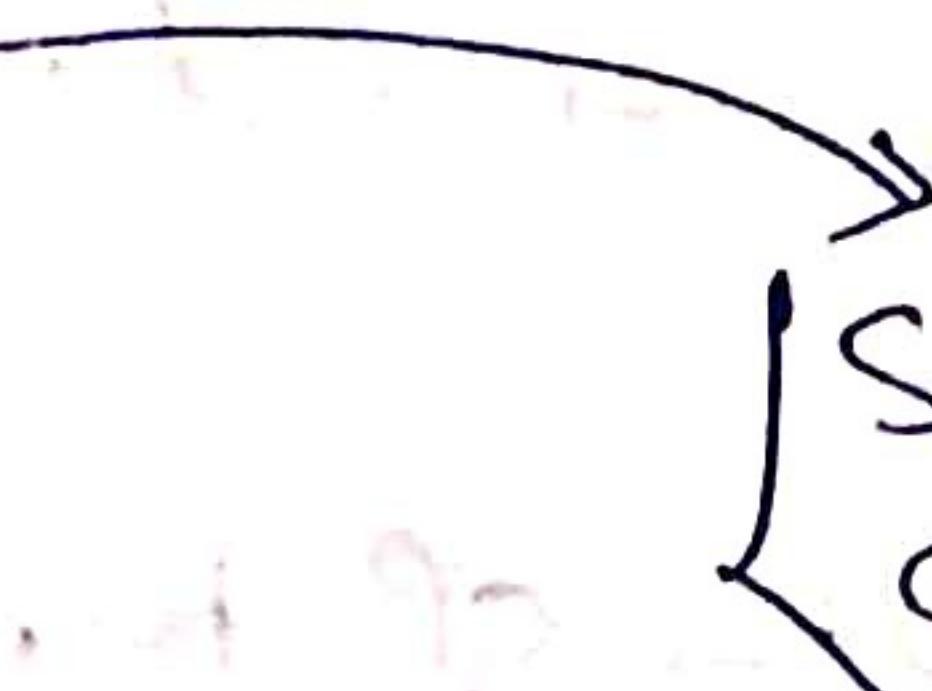
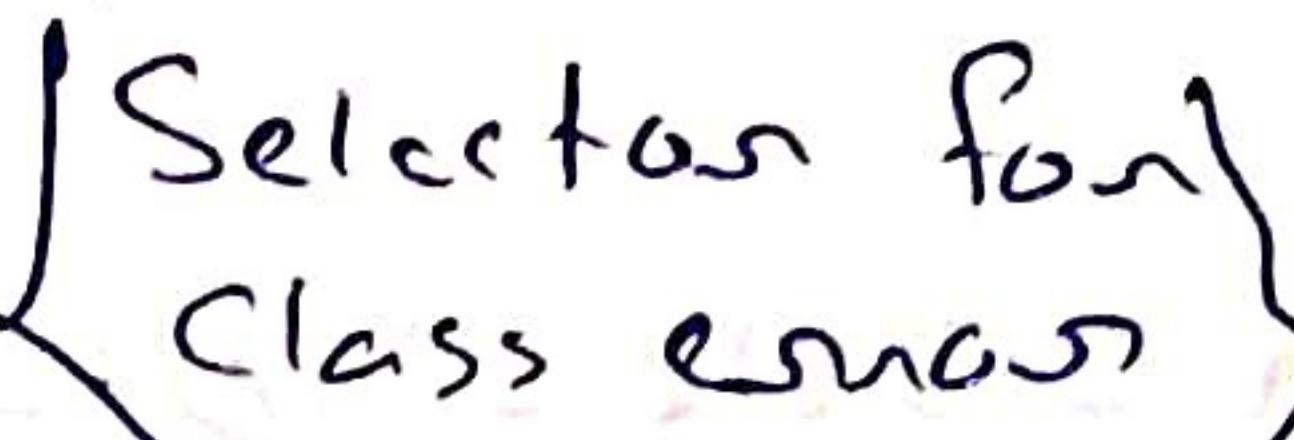
With absolute position →
fixed position /
absolute position

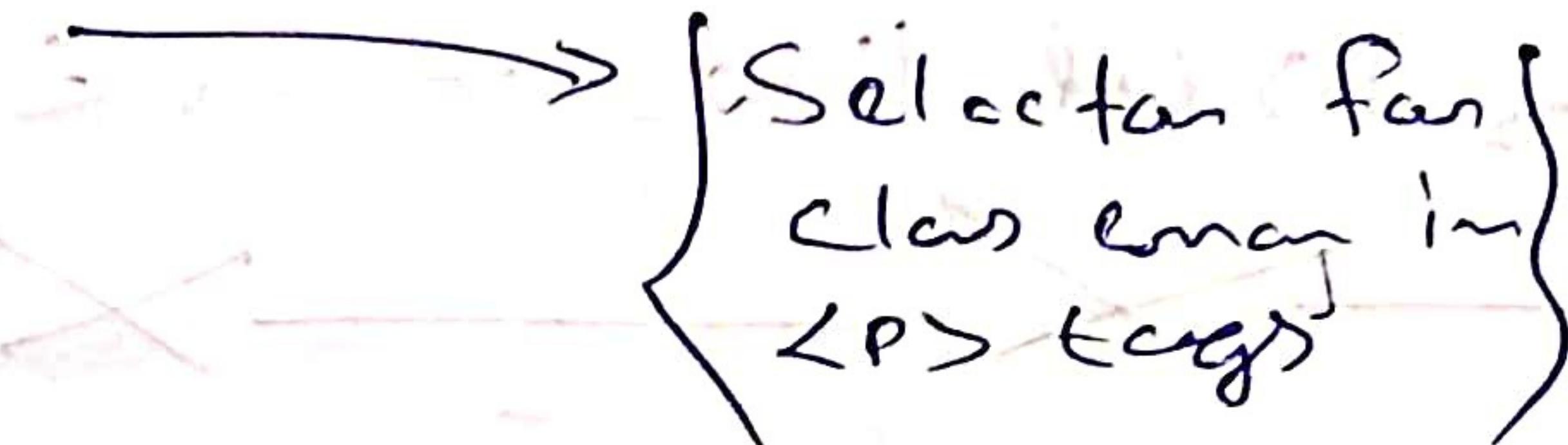
relative position

5

CSS Classes & Selectors

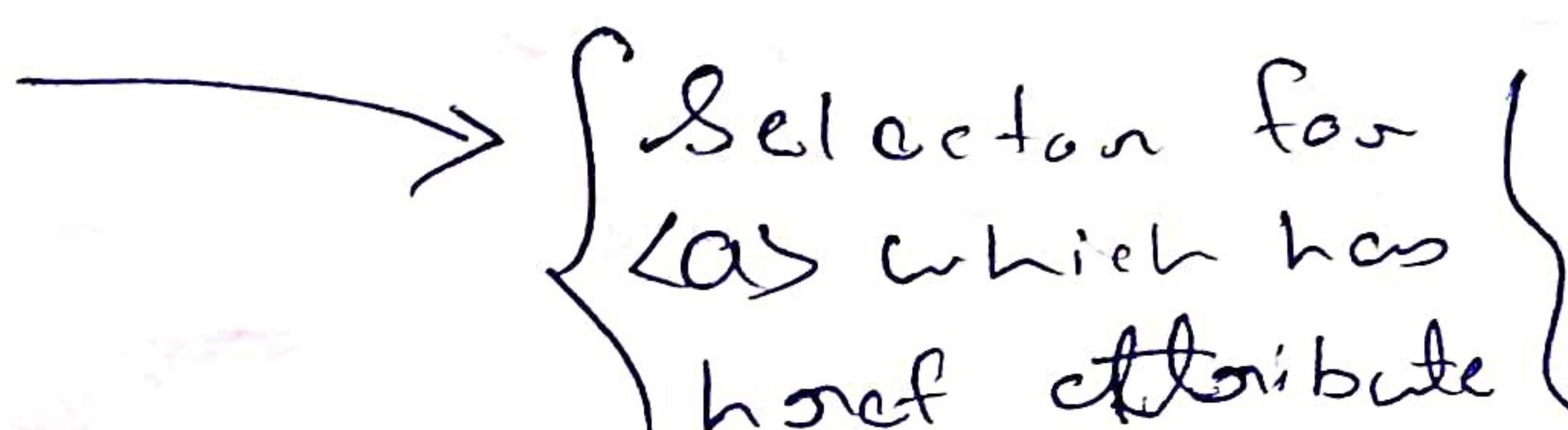
<P class="error"> Error message </P>

.error {
}
} 
} 

P.error {
}
} 

div p {
}
} 

descendant selector

a[href] {
}
} 

★ The Cascade

Inheritance

→ HTML elements can inherit CSS properties that are applied to their parents.

⇒ Some declarations are inherited and some are not.

→ To force inheritance explicitly:

P{

margin: inherit;

}

P tag will inherit margin from its parent

⑥

HTML5 Semantic

① `<main>`

⇒ For main content of a webpage, unique to that page.

② `<Section>`

⇒ Defines a certain section of a webpage (e.g. blog, list, Contact info)

③ `<article>`

⇒ Defines a bit of content which makes up an article.

④ `<aside>`

⇒ Defines some content related to something else

⑤ `<header>`

⇒ For the header of a website

⑥ `<footer>`

⇒ For footer of a website



(8)

CSS Layouts & Positions

⇒ The position property can have one of 5 values:

- Static (default)
- Relative
- Fixed
- Absolute
- Sticky

Position: absolute;
left: 20px
bottom: 20px

Position: fixed;
left: 0px
right: 0px

Position things
absolutely relative
to its closest
Parent

{ Acts as a mixture
of static & fixed }

} Positions certain
elements relative
to View port

9

Pseudo classes and elements

★ Pseudo Classes

→ style elements when they're in a particular state:

- hover
- focus
- first-child of a parent

nav li a: hover {

text-decoration: underline

10

Intro to Media Queries

Media Queries

→ Tell the browser how to style an element at particular view port dimensions

~~height width~~

~~background-color~~

~~font-size~~

~~color~~

~~position absolute~~

~~background-position~~

~~background-size~~

~~background-color~~

~~background-color~~

~~background-color~~