Web programming lab

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G1

1. What are the differences between the opacity property and alpha channel in rgba or hsla?

1)Opacity Property:

-The opacity property is a single value (range: 0 to 1) that applies to the entire element and its contents, including text and child elements.
-It affects the element and all its descendants uniformly, making them transparent.

-When an element is set to a lower opacity, it affects not only the visual appearance but also the interaction with the element .The element and its contents become less visible, and any events triggered within the element will be less responsive.

-The opacity property affects the entire element, including its background, border, and any child elements, regardless of their individual opacity settings.

-The opacity property can be animated using CSS transitions or animations.

2)Alpha Channel in RGBA and HSLA:

-The alpha channel is a separate value (range: 0 to 1) that is added to an RGBA or HSLA color, allowing you to control the transparency of the specific color.

-It affects only the color value it is applied to and does not affect the element's background, border, or child elements.

-You can specify different alpha values for different colors within a single element, allowing for more granular control over transparency.

-The alpha channel does not affect the interaction with the element. Even if a color has a low alpha value, the element and its contents will still respond to events as if they were fully opaque.

-The alpha channel in RGBA or HSLA colors can be used for more sophisticated effects, such as creating gradients with varying transparency levels or overlaying semi-transparent colors on top of each other
.
-The alpha channel in RGBA and HSLA can also be animated using CSS transitions or animations.

)What is the most effective method for setting CSS color properties?
Keyword Values ,
- Hexadecimal Values,-RGBA and HSLA Values

3) Create 3 divisions in a web page.

```
<!DOCTYPE html>
<html><head>
<style>
.first-div {
background: linear-gradient(to bottom, #ff0000, #ff9999);
padding: 20px;}
.first-div p {
background-color: rgba (247, 60, 60, 0.8);
margin-bottom: 10px; padding: 10px;color: white;} .second-div {
background-image:
url('D:\photo\galaxy_night_starry_sky_118126_1280x720.jpg');
background-repeat: repeat-x;
padding: 20px;}
.third-div {
background: url('D:\photo\house_forest_tree_126440_1280x720.jpg')
no-repeat right top;
background-size: contain;
padding: 20px;
position: fixed;
top: 0;
right: 0;
width: 400px;
}
</style>
</head>
<body>
<div class="first-div">
<p>Paragraph 1</p>
<p>Paragraph 2</p>
<p>Paragraph 3</p>
</div>
<div class="second-div">
<!-- Add your content here -->
</div>
<div class="third-div">
<p>Some text with box model</p>
</div>
```

```html
</body></html>
```