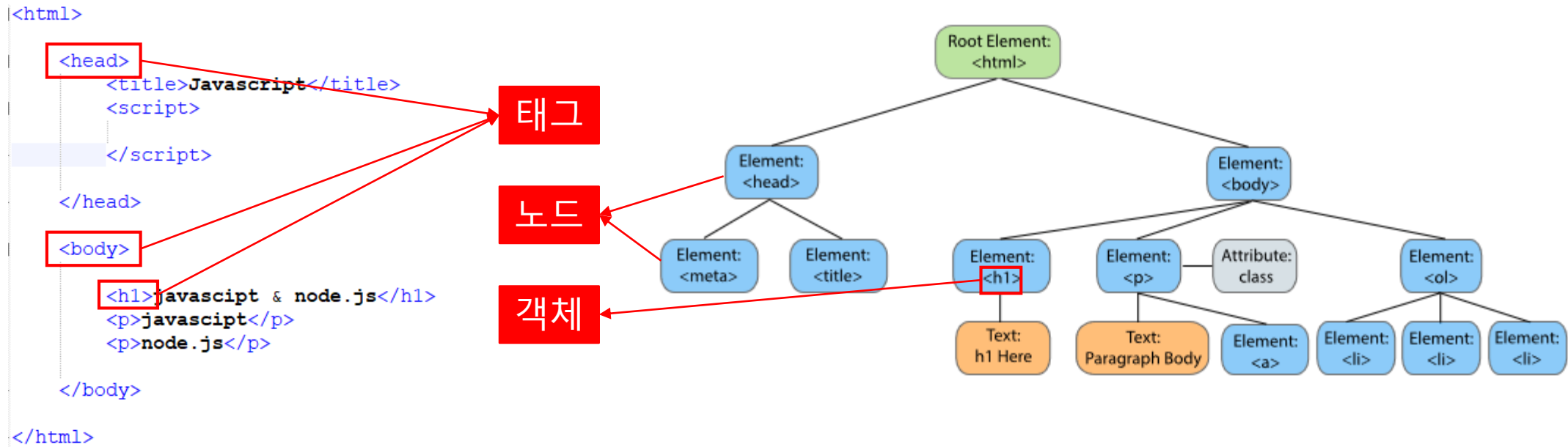


14강_DOM(문서객체)

- 14-1 DOM개요
- 14-2 javascript를 이용해서 문서만들기
- 14-3 javascript를 이용해서 객체 선택하기
- 14-4 javascript를 이용해서 객체 삭제하기
- 14-5 javascript를 이용해서 CSS적용하기

14-1 : DOM개요

DOM이란? Document Object Model의 약자로 웹문서(태그)와 관련된 객체를 뜻한다.



Javascript를 이용해서 html태그 객체를 생성, 추가, 삭제, 이동 등의 작업을 할수 있습니다.

14-2: javascript를 이용해서 문서만들기

Ex : 14_01.html

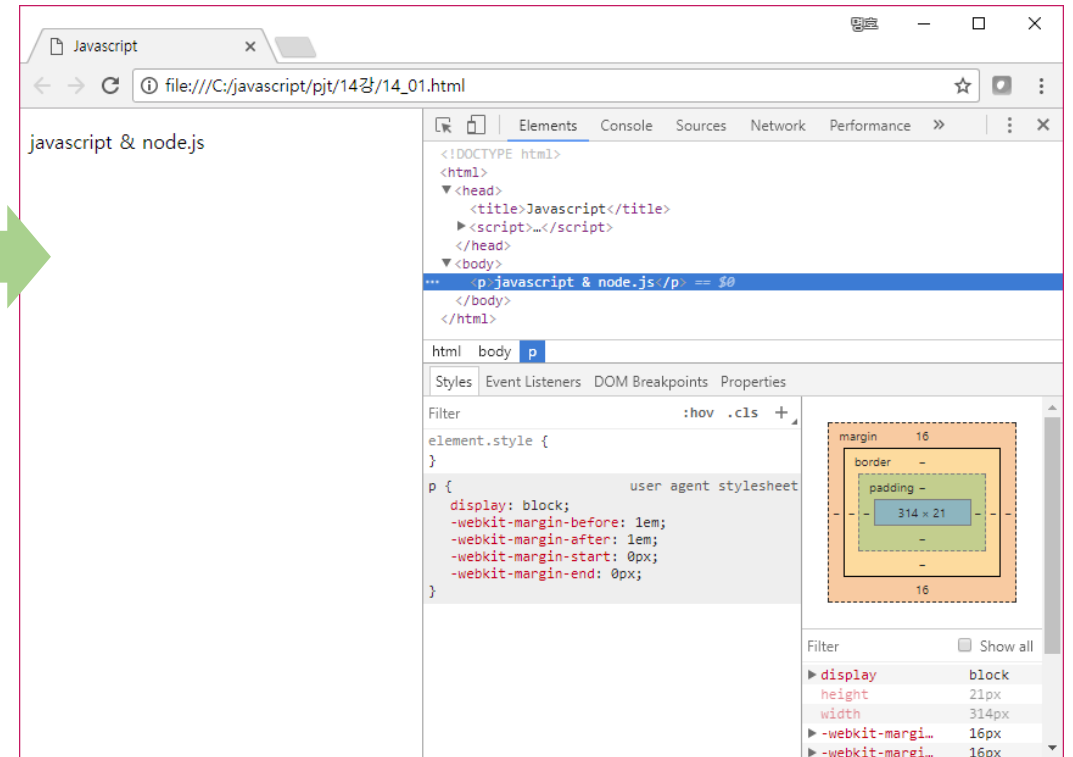
1) 텍스트 노드 이용하기

```

<head>
  <title>Javascript</title>
  <script>
    window.onload = function() {
      요소노드 → var elementNode = document.createElement("p");
      텍스트노드 → var textNode = document.createTextNode("javascript & node.js");

      elementNode.appendChild(textNode);
      document.body.appendChild(elementNode);
    };
  </script>
</head>
<body>
</body>
  
```

객체



14-2: javascript를 이용해서 문서만들기

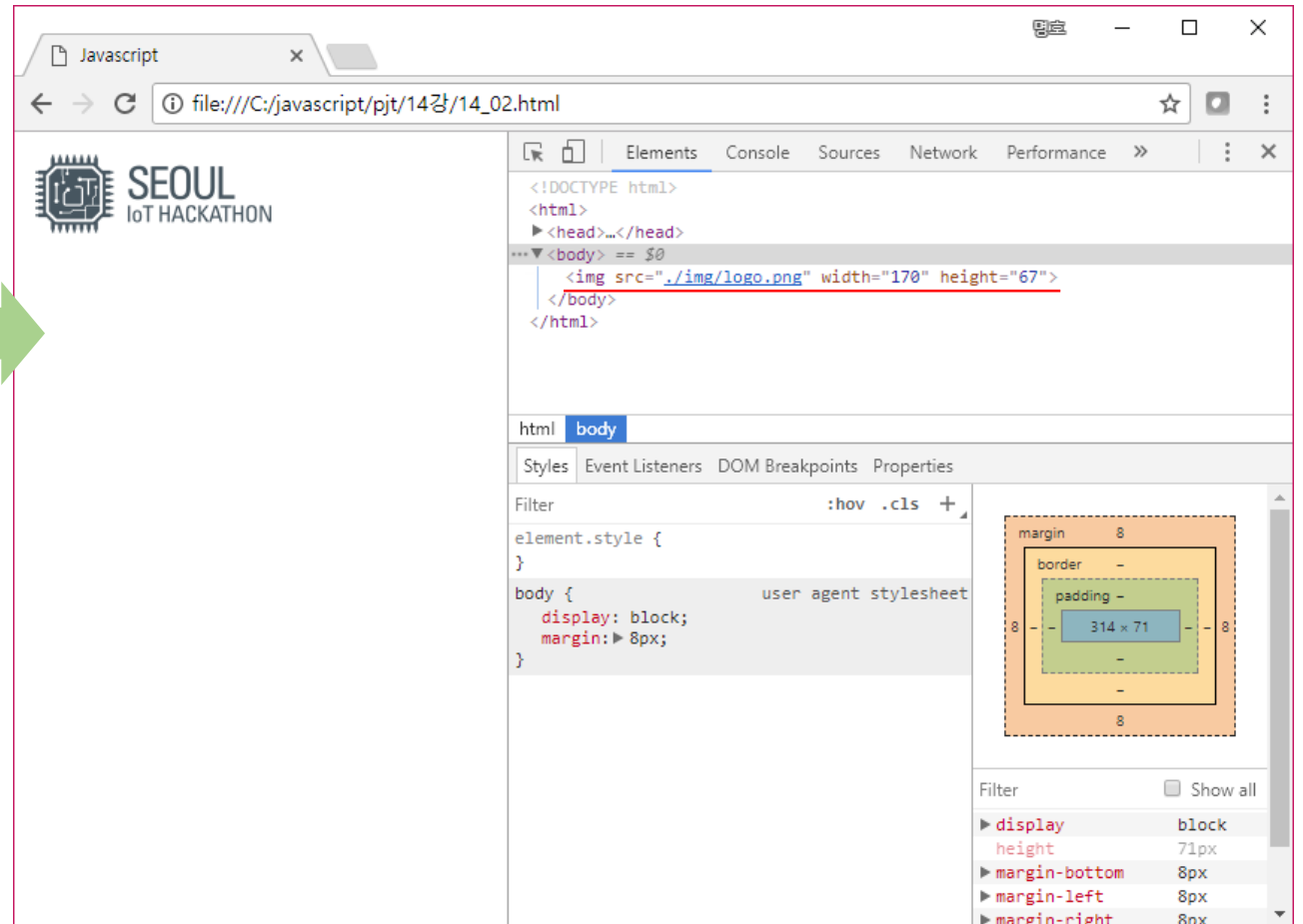
Ex : 14_02.html

2) 텍스트 노드외 노드 이용하기 - 1

```
<head>
  <title>Javascript</title>
  <script>
    window.onload = function() {
      var imgNode = document.createElement("img");
      imgNode.src = "./img/logo.png";
      imgNode.width = "170";
      imgNode.height = "67";
      document.body.appendChild(imgNode);
    };
  </script>
</head>
<body>
</body>
```

객체 생성

노드 연결



14-2: javascript를 이용해서 문서만들기

Ex : 14_02.html

3) 텍스트 노드외 노드 이용하기 - II

```

<head>
  <title>Javascript</title>
  <script>

    window.onload = function() {

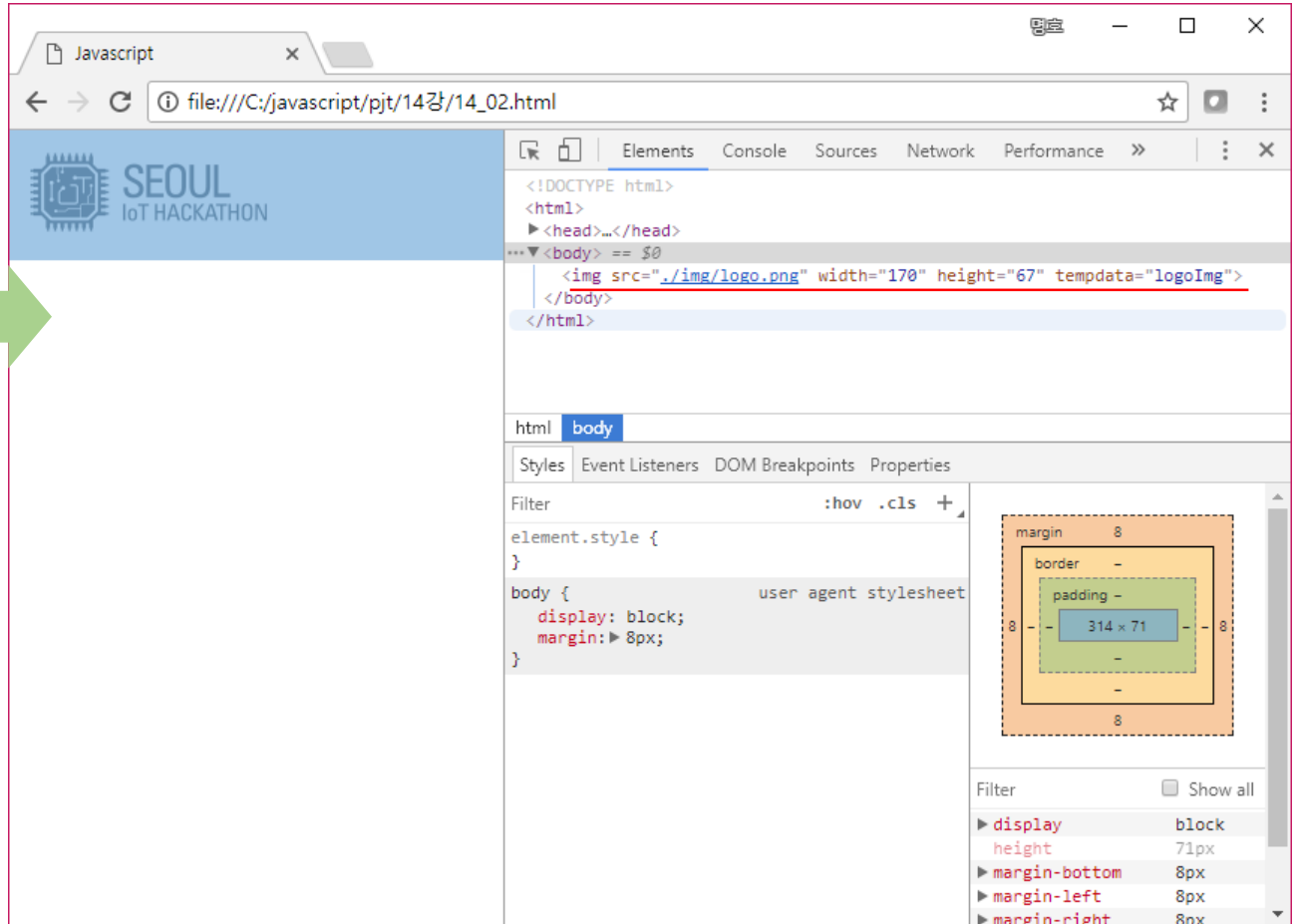
      var imgNode = document.createElement("img");
      imgNode.setAttribute("src", "./img/logo.png");
      imgNode.setAttribute("width", 170);
      imgNode.setAttribute("height", 67);
      imgNode.setAttribute("tempData", "logoImg");

      document.body.appendChild(imgNode);
    };

  </script>
</head>
<body>
</body>
  
```

객체 생성

노드 연결



14-2: javascript를 이용해서 문서만들기

Ex : 14_03.html

4) innerHTML속성 사용하기

```

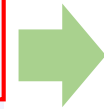
<head>
  <title>Javascript</title>
  <script>

    window.onload = function() {

      문자열 생성
      innerHTML속성
      var str = "";
      str += "<p> javascript & node.js </p>";
      str += "<img src='./img/logo.png',";
      str += "width='170', height='67', tempData='logoImg'>";

      document.body.innerHTML = str;

    };
  </script>
</head>
<body>
</body>
  
```



The browser screenshot shows the rendered page with the text "javascript & node.js" and a logo. The developer tools are open, showing the DOM tree with the following HTML structure:

```

<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <p> javascript & node.js </p> == $0
    <img src='./img/logo.png' ,width='170' , height='67' tempdata='logoImg'>
  </body>
</html>
  
```

The selected paragraph element is shown in the Styles pane with the following CSS:

```

p {
  display: block;
  -webkit-margin-before: 1em;
  -webkit-margin-after: 1em;
  -webkit-margin-start: 0px;
  -webkit-margin-end: 0px;
}
  
```

The visualizer shows a box model with a width of 170px and a height of 67px, with a 16px margin and padding.

14-3: javascript를 이용해서 객체 선택하기

Ex : 14_04.html

id속성값을 이용해서 객체 선택하기 : document.getElementById("id속성값");

```
<head>
<title>Javascript</title>
<script>

window.onload = function() {

    var str = "";
    str += "<p id='jsTitle'> javascript & node.js </p>";
    str += "<img id='logoImg', src='./img/logo.png',";
    str += "width='170', height='67', tempData='logoImg'>";

    document.body.innerHTML = str;

    var titleNode = document.getElementById("jsTitle");
    titleNode.innerHTML = "JS & node";

    var logoNode = document.getElementById("logoImg");
    logoNode.setAttribute("src", "./img/arm_mbed.png");
    logoNode.setAttribute("width", 297);
    logoNode.setAttribute("height", 124);

};
</script>
</head>
<body>
</body>
```

객체 선택



The screenshot shows a web browser window with the URL `file:///C:/javascript/pjt/14강/14_04.html`. The page content is "JS & node" and an "arm MBED" logo. The developer tools are open, showing the DOM tree with the selected element `p#jsTitle`. The styles panel shows the following styles:

```
element.style {
}
p {
  display: block;
  -webkit-margin-before: 1em;
  -webkit-margin-after: 1em;
  -webkit-margin-start: 0px;
  -webkit-margin-end: 0px;
}
```

The visual representation of the styles shows a box with a width of 314px and a height of 21px, with a margin of 16px and a padding of 16px.

14-4: javascript를 이용해서 객체 삭제하기

Ex : 14_05.html

부모객체를 찾은 다음 부모객체에서 자식객체를 삭제한다.

```
<head>
  <title>Javascript</title>
  <script>

    window.onload = function() {

      var str = "";
      str += "<p id='jsTitle'> javascript & node.js </p>";
      str += "<img id='logoImg', src='./img/logo.png',";
      str += "width='170', height='67', tempData='logoImg'>";

      document.body.innerHTML = str;

      var titleNode = document.getElementById("jsTitle");
      titleNode.parentNode.removeChild(titleNode);

      var logoNode = document.getElementById("logoImg");
      logoNode.parentNode.removeChild(logoNode);

    };
  </script>
</head>
```



14-5: javascript를 이용해서 CSS적용하기

Ex : 14_06.html

style속성을 이용한 CSS적용

```

<head>
  <title>Javascript</title>
  <script>

    window.onload = function() {

      var str = "";
      str += "<p id='jsTitle'> javascript & node.js </p>";
      str += "<img id='logoImg', src='./img/logo.png'>";

      document.body.innerHTML = str;

      var titleNode = document.getElementById("jsTitle");
      titleNode.style.fontSize = "1.2em";
      titleNode.style.border = "1px solid #ff0000";

      var logoNode = document.getElementById("logoImg");
      logoNode.style.width = "170px";
      logoNode.style.height = "67px";

    };

  </script>
</head>
<body>
</body>
  
```

The screenshot shows a web browser window with the title 'javascript & node.js'. The page content includes the 'SEOUL IoT HACKATHON' logo. The developer tools are open, showing the HTML structure and the styles applied to the elements. The HTML structure is as follows:

```

<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <p id="jsTitle" style="font-size: 1.2em; border: 1px solid rgb(255, 0, 0);"> javascript & node.js </p>
    
  </body>
</html>
  
```

The developer tools show the styles applied to the elements:

```

body {
  display: block;
  margin: 8px;
}
  
```

The styles applied to the `jsTitle` element are:

```

font-size: 1.2em;
border: 1px solid #ff0000;
  
```

The styles applied to the `logoImg` element are:

```

width: 170px;
height: 67px;
  
```