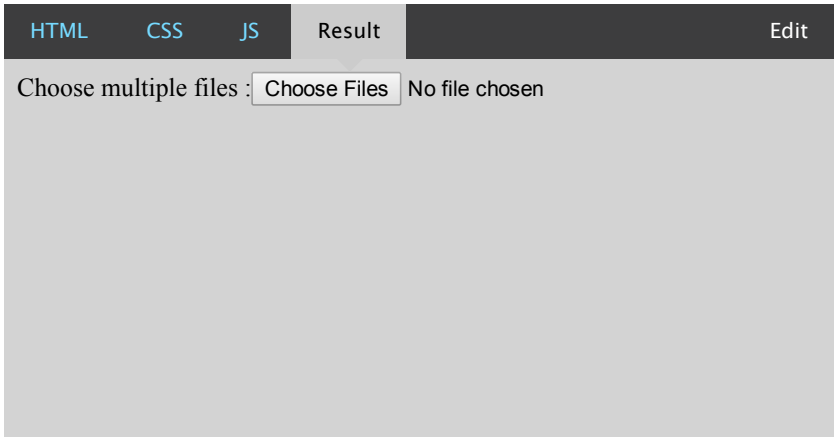
Drag and drop images with thumbnail previews

This time, let's reuse the `readFilesAndDisplayPreview()` method we saw in the File API chapter in the HTML5 Part 1 course.

We have reproduced the example here - look at the source code to refresh your memory (click on the JS tab or look at the example at CodePen).

Click the "open file" button (an `<input type="file">` element), select one or more images -- you should see the image thumbnails displayed in the HTML document:



Source code extract (the part that reads the image file content and displays the thumbnails):

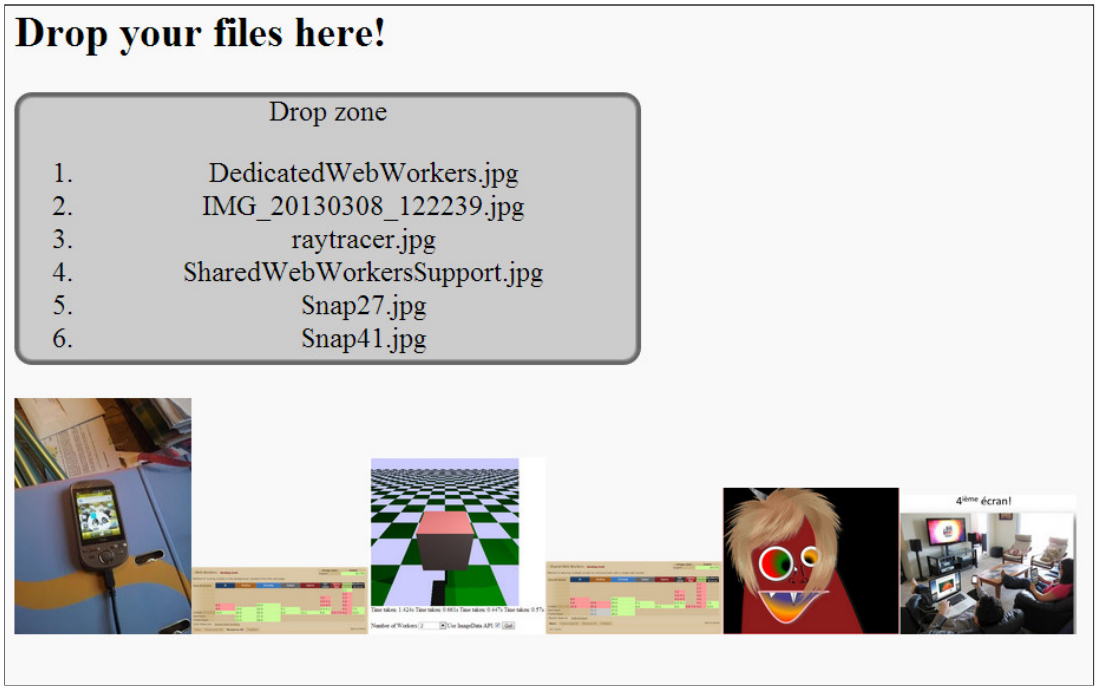
```
function readFilesAndDisplayPreview(files) {
  // Loop through the FileList and render image files
  // as thumbnails.
  for (var i = 0, f; f = files[i]; i++) {
    // Only process image files.
    if (!f.type.match('image.*')) {
       continue;
    }
    var reader = new FileReader();
    //capture the file information.
    reader.onload = function(e) {
        // Render thumbnail.
        var span =document.createElement('span');
        span.innerHTML = "<img class='thumb' src='" +
                         e.target.result +"'/>";
        document.getElementById('list').insertBefore(span, null);
    };
    // Read the image file as a data URL. Will trigger
    // a call to the onload callback above
    // only once the image is completely loaded
    reader.readAsDataURL(f);
  }
```

```
    }
```

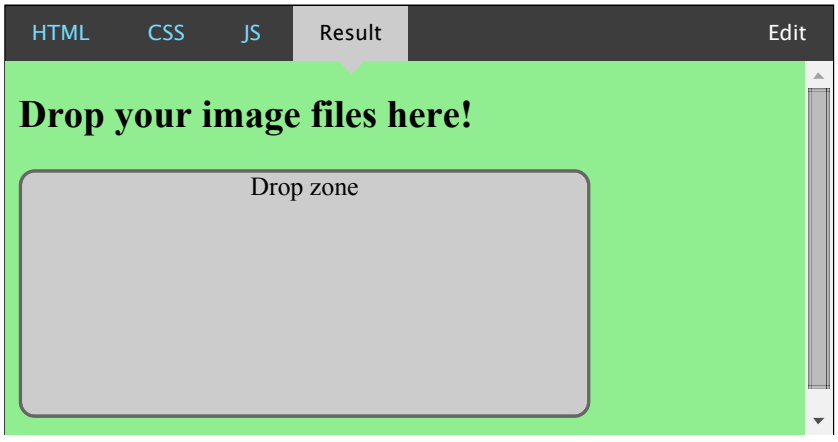
At *line 19*, we insert the `<img>` element that has been created and initialized with the `dataURL` of the image file, into a list of `id` "list".

So, let's add this method to the first example, which displays file details once dropped, and also add an `<output id="list"></output>` to the HTML of this example.

COMPLETE EXAMPLE OF DRAG AND DROP + THUMBNAILS OF IMAGES



Try it below in your browser (drag'n'drop image files in the drop zone) or play with it at CodePen:



Complete source code:

```
<!DOCTYPE html>
<html lang="en">
```

```
<head>
   <style>
      div {
         height: 150px;
         width: 350px;
         border: 2px solid #666666;
         background-color: #ccc;
         margin-right: 5px;
         border-radius: 10px;
         box-shadow: inset 0 0 3px #000;
         text-align: center;
         cursor: move;
      }
      .dragged {
         border: 2px dashed #000;
         background-color: green;
      }
      .draggedOver {
         border: 2px dashed #000;
         background-color: green;
      }
    </style>
    <script>
      function dragLeaveHandler(event) {
         console.log("drag leave");
         // Set style of drop zone to default
         event.target.classList.remove('draggedOver');
      }
      function dragEnterHandler(event) {
         console.log("Drag enter");
         // Show some visual feedback
         event.target.classList.add('draggedOver');
      }

      function dragOverHandler(event) {
         //console.log("Drag over a droppable zone");
         // Do not propagate the event
         event.stopPropagation();
         // Prevent default behavior, in particular when we drop images or links
         event.preventDefault();
      }
      function dropHandler(event) {
         console.log('drop event');
         // Do not propagate the event
         event.stopPropagation();
         // Prevent default behavior, in particular when we drop images or links
         event.preventDefault();
         // reset the visual look of the drop zone to default
         event.target.classList.remove('draggedOver');

         // get the files from the clipboard
         var files =event.dataTransfer.files;
         var filesLen = files.length;
```

```
            var filenames = "";
            // iterate on the files, get details using the file API
            // Display file names in a list.
            for(var i = 0 ; i < filesLen ; i++){
               filenames += '\n' +files[i].name;
               // Create a li, set its value to a file name, add it to the ol
               var li =document.createElement('li');
               li.textContent = files[i].name;
               document.querySelector("#droppedFiles").appendChild(li);
            }
            console.log(files.length + ' file(s) have been dropped:\n' + filenames);
            readFilesAndDisplayPreview(files);
         }
         functionreadFilesAndDisplayPreview(files) {
            // Loop through the FileList and render image files as thumbnails.
            for (var i = 0, f; f = files[i];i++) {
            // Only process image files.
            if (!f.type.match('image.*')) {
               continue;
            }
            var reader = new FileReader();

            //capture the file information.
            reader.onload = function(e) {
               // Render thumbnail.
               var span =document.createElement('span');
               span.innerHTML = "<img class='thumb' width='100'
src='" +e.target.result + "'/>";
               document.getElementById('list').insertBefore(span, null);
            };
            // Read the image file as a data URL. Will trigger the call to the above
callback when
            // the image file is completely loaded
            reader.readAsDataURL(f);
         }
      }
    </script>
</head>
<body>
 <h2>Drop your files here!</h2>
 <div id="droppableZone"ondragenter="dragEnterHandler(event)"ondrop="dropHandler(event)"
                          ondragover="dragOverHandler(event)"
 ondragleave="dragLeaveHandler(event)">
    Drop zone
    <ol id="droppedFiles"></ol>
 </div>
 <br/>
 <output id="list"></output>
 <body>
 <html>
```

Above, we added the `readFilesAndDisplayPreview()` method we saw earlier. We called it at the end of

the `drop` handler (*line 77*), and we added the `<output>` element that will contain the `<img>`elements corresponding to the thumbnails (*line 114*).