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| **JavaScript for WK3-mpg.js (Client Side Web Programming, Fall 2017)**  //FUNCTION  var **$** = function(id){  return document.getElementById(id);  }  //FUNCTION  var **numberFormat** = function(number, decimal) {  return (number).toFixed(decimal);  }  // FUNCTION  var **calculateMPG** = function(){  var isValid = true;  //USER INPUT  var miles = parseFloat(**$("miles")**.value);  var gallons = parseFloat(**$("gallons")**.value);  //VALIDATE USER INPUT  if (isNaN(miles) || miles <= 0){  **$("error\_miles")**.firstChild.nodeValue = "Please  enter a number greater than 0";  isValid = false;  }  else{  **$("error\_miles")**.firstChild.nodeValue = "\*";  }  if (isNaN(gallons) || gallons <= 0){  **$("error\_gallons")**.firstChild.nodeValue = "Please  enter a number greater than 0";  isValid = false;  }  else{  **$("error\_gallons"**).firstChild.nodeValue = "\*";  }  //IF USER INPUTS ARE VALID, DO CALCULATION  if (isValid == true){  var mpg =miles/gallons;  **$("answer")**.value = **numberFormat**(mpg, 2);  }  }  //ONLOAD EVENT HANDLER  window.onload = function () {  //ATTACH EVENT HANDLER TO BUTTONS  **$("execute")**.onclick = **calculateMPG**;  //HIGHLIGHT FIRST TEXTBOX  **$("miles")**.focus();  } | **WK3-mpg.html**  <!DOCTYPE html>  <html>  <head> <meta charset="UTF-8"> <title> Calculate MPG </title>  <script src="wk3-mpg.js"> </script>  </head>  <body>  <h1>Calculate MPG</h1>  <script>  var today = new Date();  document.write("Today's date: " + today.toDateString());  </script>  <p>  <form id = "mpg\_app" name = "mpg\_app" action = "wk3-miles.html" method = "get">  <label for= "miles">Enter the miles driven: </label>  **<input type="text" id = "miles">**  **<span id = "error\_miles" > \* </span>**  <br><br>  <label for= "gallons">Enter gallons of gas used: </label>  **<input type="text" id = "gallons">**  **<span id = "error\_gallons"> \* </span>**  <br><br>  <label for= "result">Miles per gallon: </label>  **<input type="text" id="answer" disabled>**  <br><br>  **<input type="button" id = "execute" value = "Execute Program">**  </form>  </p>  </body>  </html>  ----------------------------------------------------------------------------------------------------------  **Browser Display of WK3-mpg.html** |