

JavaScript – Getting the time:

```
$(document).ready(function() {  
    function displayTime() {  
    }  
});
```

Create a variable for time inside of the function:

```
var currentTime =
```

Set the value of the new variable (this asks the local computer for the date):

```
new Date();
```

Create a variable for the hours:

```
var hours = currentTime.getHours();
```

Now create variables for minutes and seconds.

JavaScript – Making a clock:

```
var clockDiv = document.getElementById('clock');
```

JavaScript – Making the time appear in the clock:

```
clockDiv.innerHTML = hours + ":" + minutes + ":" + seconds;
```

JavaScript – Making everything actually appear:

```
displayTime();
```

HTML – Being able to see what we're doing:

```
<body>  
    <div id='clock'></div>  
</body>
```

CSS – Making it look better:

Set a background color for <body>

Create the ID for 'clock' and set its position

```
margin: auto;  
position: absolute;  
top: 0; left: 0; bottom: 0; right: 0;  
padding-top: 70px;
```

...and size (100px high, 800px wide)

...and text style (your choice of font and color, but put the text in the middle of the page (horizontally) and make the size 100px)

JavaScript – Making a clock tick every second:

```
setInterval(displayTime, 1000);
```

JavaScript – Adding zeros to the time:

Inside the displayTime function, after the hours, minutes, and seconds variables:

```
if (seconds < 10) {  
    seconds = "0" + seconds;  
}
```

Do the same thing for hours and minutes

JavaScript – AM or PM?:

Inside the displayTime function, after the hours, minutes, seconds, (and before the if/then conditions):

```
var meridiem = "AM";
```

Set it to 12-hour format instead of 24-hour:

```
if (hours > 12) {  
    hours = hours - 12;  
    meridiem = "PM";  
}
```

Make it so noon and midnight say "12" instead of "00":

```
if (hours === 0) {  
    hours = 12;  
}
```

Add the "AM" or "PM" to the display (in the clockDiv.innertext:

```
+ " " + meridiem;
```

(all the things) – International date/time:

Now make it so the current local time (the full date) is at the top of the page (use getDay, getDate, getMonth, and getYear), and the times for four other time zones are displayed below (e.g. Seoul, Beijing, Washington DC, Madrid). Set it so each time zone has a different background color (and font color, if your background color is dark)!

TUESDAY APR 16 2020 09:43:06 AM	
Seoul 09:43:06 AM	Beijing 09:43:06 AM
Madrid 09:43:06 AM	Washington D.C. 09:43:06 AM

Javascript – Good coding practice:

Write in comments for each line of your JS code that tells what the line does. (For example, explain why setInterval is 1000, what the code for clockDiv.innerText does, etc).

```
// for each line of comment in JS (if you need to use more than one line  
// to comment, put the "//" at the beginning of each.)
```

Challenge

See if you can make it into an alarm clock! See if you can get it to play an animated gif and/or play a sound when the clock reaches a certain time.