# What does it mean for a data structure to be described as a functor? Give a code example in JavaScript in your explanation

For a data structure to be described as a functor, the data structure must be able to hold elements of any data type and which implements the map operation i.e. a function. The data must have functional programming that allows solutions to be easily composed, be more declarative and obvious, be easier to reason about and be easier to get right and debug if wrong.

JavaScript code example:

// Javascript arrays are functors

['123', '456', '789']

.map(s => parseInt(s))

.map(n => n / 10)

# Describe how the flexbox model works in CSS

The flexbox model is a new layout module in CSS3 and it is made to improve items alignment, directions and order in containers even when they are dynamic or unknown sizes. Flexbox consists of flex containers and flex items. A flex container is declared by setting the display property of an element to either ‘flex’ or ‘inline-flex’. There are always one or more flex items inside a flex container. By default there is only one flex line per flex container. Below is a CSS example of a flex container and a flex item:

|  |  |
| --- | --- |
| .flex-container {  display: -webkit-flex;  display: flex;  width: 400px;  height: 250px;  background-color: lightgrey;  } | .flex-item {  background-color: cornflowerblue;  width: 100px;  height: 100px;  margin: 10px;  } |