Interacting With the Chart

https://developers.google.com/chart/interactive/docs/basic_interactivity

some kinds of events

- *ready* - Thrown when the chart is drawn on the page and ready to respond to methods. Listen for this event if you need to request information from the chart

- *select* - Thrown when the user selects something on the chart, typically by clicking on a bar or pie slice

- *error* - Thrown when the chart can't render the data passed in, typically because the `DataTable` format is wrong

- *onmouseover* and *onmouseout* - Thrown when the user mouses over or off of a specific chart element, respectively

handler and listener

```javascript
//Create the ready handler
function readyHandler() {
    alert("the chart has been successfully loaded!");
}


//Set the ready listener
google.visualization.events.addListener(chart, 'ready', readyHandler);
```

exercise

create a new chart and catch some events!

```html
<!DOCTYPE html>
<html>
<head>
    <title>esercizio 2 google charts</title>
    <meta charset="utf-8"/>
    <script src="https://www.google.com/jsapi"></script>
    <script src="js/script.js"></script>
</head>
<body>

    <h1>Click on the chart below!</h1>

    <div id="chart_div"></div>

</body>
</html>
```

script.js

```javascript
// Load the Visualization API and the piechart package.
google.load('visualization', '1.0', {'packages':['corechart']});

// Set a callback to run when the Google Visualization API is loaded.
google.setOnLoadCallback(drawChart);

// Callback that creates and populates a data table,
// instantiates the pie chart, passes in the data and
// draws it.
function drawChart() {

    |                              <-- code here!!

} //end of the drawChart() function
```

our data

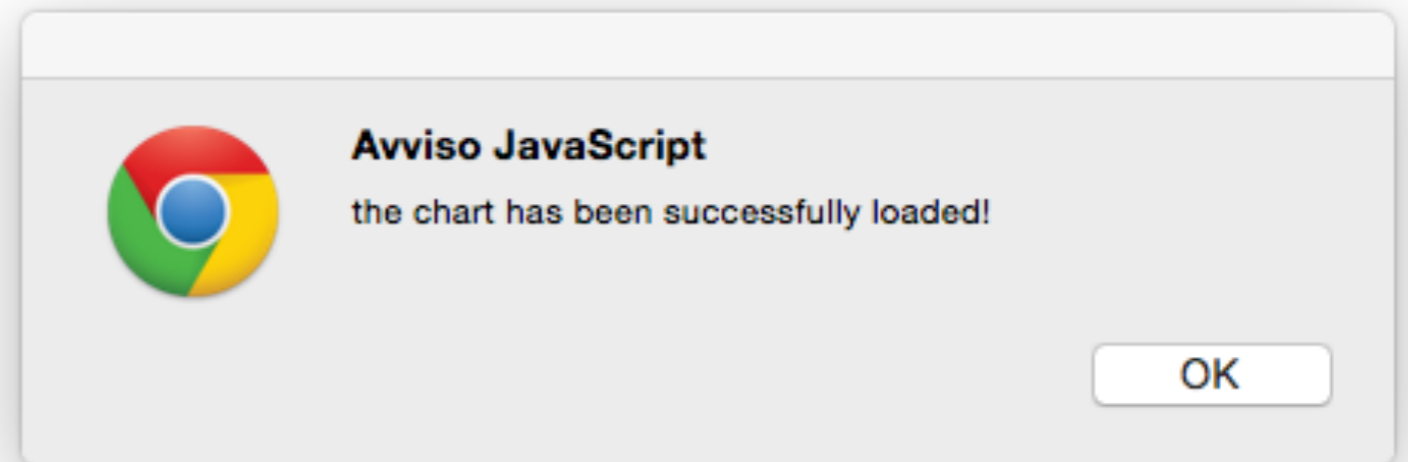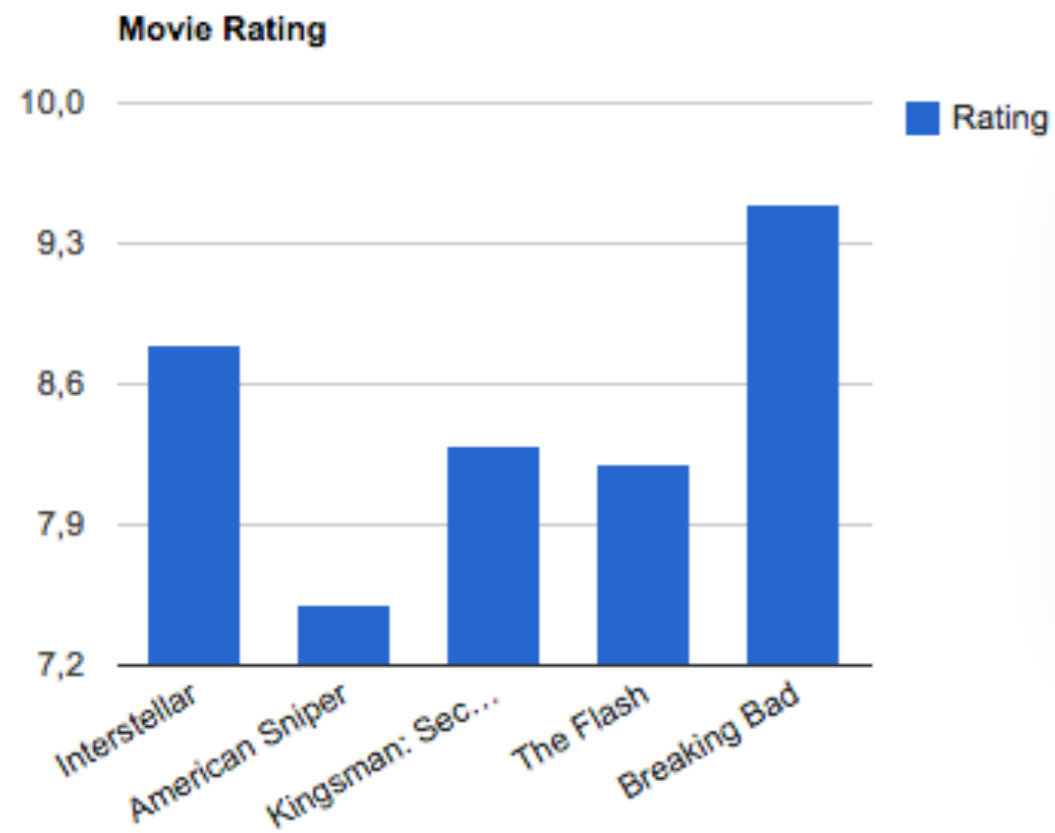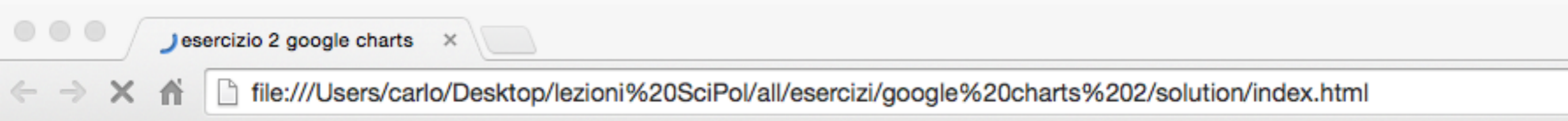| movie	rating
Interstellar	8.8
American Sniper	7.5
Kingsman: Secret Service	8.3
The Flash	8.2
Breaking Bad	9.5

create handler and listener for ready event

```javascript
// Instantiate and draw our chart, passing in some options.
var chart = new google.visualization.ColumnChart(
    document.getElementById('chart_div')
);

//Create the ready handler
function readyHandler() {
    alert("the chart has been successfully loaded!");
}

//Set the ready listener
google.visualization.events.addListener(chart, 'ready', readyHandler);

chart.draw(data, options);
```

new code

result

the select event

```
//Create the selection handler
function selectHandler() {
    var selectedItem = chart.getSelection()[0];
    if (selectedItem) {
        var movie = data.getValue(selectedItem.row, 0);
        alert('The user selected ' + movie);
        window.open("http://www.imdb.com");
    }
}

//Set the selection listener
google.visualization.events.addListener(chart, 'select', selectHandler);
```

now try to click the pie!