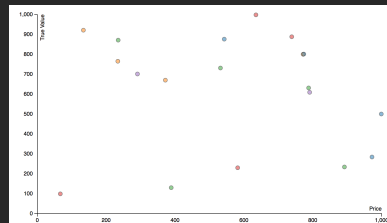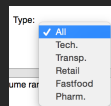# Example: filter data - dropdown

- **Maintain a version of the full data**
- **On change to dropdown, filter the data according to new selection and re-render**

Example: filter data - dropdown

```html
<div id="filters">
 <select id="myselectform">
  <option value="all">All</option>
  <option value="tech">Tech.</option>
  <option value="transp">Transp.</option>
  <option value="retail">Retail</option>
  <option value="fastfood">Fastfood</option>
  <option value="pharm">Pharm.</option>
 </select>
</div>
```



```html
<script>
document.getElementById("myselectform").onchange =
  function(){
     filterType(this.value);
   }
</script>
```
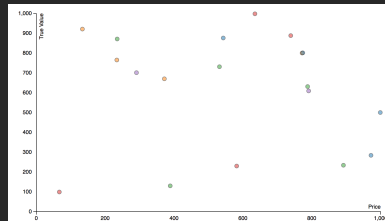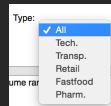
Example: filter data - dropdown

```
var patt = new RegExp("all");
var dataset;

d3.csv("stocks.csv", function(error, stocks) {
    if (error) return console.warn(error);
    stocks.forEach(function(d) {
        d.price = +d.price;
        d.tValue = +d.tValue;
        d.vol = +d.vol;
    });
    dataset = stocks;
    drawVis(dataset);
});

function filterType(mtype) {
        var res = patt.test(mtype);
         if(res){
                drawVis(dataset);
        }else{
           var ndata = dataset.filter(function(d) {
                return d["type"] == mtype;
           });
           drawVis(ndata);
        }
}
```
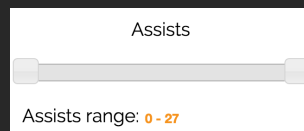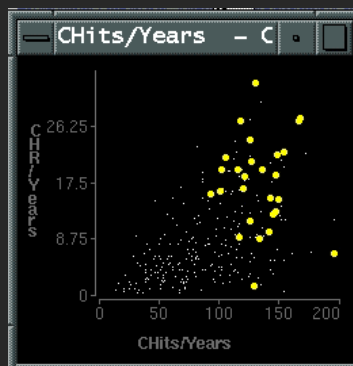
```
function drawVis(data) {
  //construct the visualization here
}
```

Example: filter data - 1 slider

Example:
- **Scatterplot showing homeruns over hits**
- **Filter by assists**

```
<script src="http//code.jquery.com/jquery-
1.10.2.js"></script>
```

```
<script src="http//code.jquery.com/ui/1.11.1/jquery-
ui.js"></script>
```

Example: filter data - 1 slider

The range slider (jQuery):

```html
<p>Assists</p>
    <div id="assists" class="slider-range"></div>
    <label for="assistamount">Assists range:</label>
    <input type="text" id="assistamount" readonly style="border:0;
color:#f6931f; font-weight:bold;">
```

The handler function:

```javascript
$(function() {
   $( "#assists" ).slider({
     range: true,
     min:  0,
     max: maxAssists,
     values: [ 0, maxAssists ],
     slide: function( event, ui ) {
       $( "#assistamount" ).val( ui.values[ 0 ] + " - " + ui.values[ 1 ] );
       filterAssists(ui.values); }  });
   $( "#assistamount" ).val( $( "#assists" ).slider( "values", 0 ) +
     " - " + $( "#assists" ).slider( "values", 1 ) );   });
```

Example: filter data - 1 slider

```javascript
var dataset = ...  #the full dataset (don't overwrite!)

function filterAssists(values){
    var toVisualize = dataset.filter(function(d) {
        return d["assists"] >= values[0]  && d["assists"] < values[1]
    });
    updateVis(toVisualize);
}
```

What if we also had a dropdown for filtering a nominal variable?

What if we wanted to define a general filter function that could be called by multiple sliders?