

HTML code

```
<html>
  <head>
    <title>Shopping List Application</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
    <link rel="stylesheet" href="css/shoppingstyle.css">
  </head>

  <body>
</script>
    <div class="container">
      <nav class="navbar navbar-default">
        <div class="container-fluid">
          <div class="navbar-header">
            <a class="navbar-brand" href="#">Shopping List</a>
          </div>
          <ul class="nav navbar-nav">
            <li class="active"><a href="#">Home</a></li>
          </ul>
        </div>
      </nav>
      <div class="panel panel-default col-md-12">
        <div class="panel-body">
          <div class="row form-inline">

            <div class="form-group">
              <label for="itemname">Item Name</label>
              <input type="text" class="form-control" name="itemname" id=itemname />
            </div>
            <div class="form-group">
              <label for="qty">Quantity</label>
              <select name="quantity" id="qty" class="form-control">
                <option value="1">1</option>
                <option value="2">2</option>
                <option value="3">3</option>
                <option value="4">4</option>
                <option value="5">5</option>
                <option value="6">6</option>
                <option value="7">7</option>
                <option value="8">8</option>
                <option value="9">9</option>
                <option value="10">10</option>
              </select>
            </div>
          </div>
        </div>
      </div>
    </div>
  </body>
</html>
```

```

</div>
<div class="form-group">
<label for="priority">Priority</label>
<select name="priority" id="priority" class="form-control">
  <option value="low">low</option>
  <option value="medium">medium</option>
  <option value="high">high</option>
</select>
</div>
</div>

<div class="row form-inline" style="margin-top: 20px; margin-bottom: 20px;">
  <div class="form-group">
    <label for="store">Store Name</label>
    <select name="store" id="store" class="form-control">
    </select>
  </div>
  <div class="form-group">
    <label for="category">Store Section</label>
    <select name="category" id="category" class="form-control">
    </select>
  </div>
  <div class="form-group">
    <label for="price">Price</label>
    <input type="text" name="price" id="price" class="form-control">
  </div>
</div>
<div class="form-inline" style="float: right;">
<button onclick="clickedon()" class="btn btn-primary" id=gobutt>Add Item</button>
</div>
</div>
<div class="col-md-12">
<table class="table table-bordered">
  <thead>
    <tr>
      <th></th><th>Item</th><th>Quantity</th><th>Store</th><th>Section</th><th>Price</th>
    </tr>
  </thead>
  <tbody id="shoppinglist"></tbody>
</table>
</div>
</div>

```

```

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
<script src="shopping.js" type="text/javascript"></script>
</body>
</html>

```

JavaScript code

```

var stores = ['H&M', 'Amul', 'Kareems', 'Big Bazaar', 'L&T']
var sections = ['Produce', 'Meats', 'Cereal', 'Canned Goods', 'Frozen Foods', 'Dairy', 'Tools',
'Clothing']

```

```

function clickedon() {
    let rowcolids = ['itemname', 'qty', 'store', 'category', 'price']
    let vals = []
    for (let cid of rowcolids) {
        vals.push(document.getElementById(cid).value)
    }
    makeRow(vals, document.getElementById('shoppinglist'))
}

```

```

function makeRow(valueList, parent) {
    let row = document.createElement("tr")
    row.classList.add(document.getElementById("priority").value)
    let cb = document.createElement("input")
    cb.type = "checkbox"
    cb.classList.add("form-control")
    row.appendChild(cb)

    for (let val of valueList) {
        let td = document.createElement("td")
        td.innerHTML = val
        row.appendChild(td)
    }
    parent.appendChild(row)
}

```

```

function populateSelect(selectId, sList) {
    let sel = document.getElementById(selectId)
    for (let s of sList) {
        let opt = document.createElement("option")
        opt.value = s
        opt.innerHTML = s
        sel.appendChild(opt)
    }
}

```

```

    }
}

$(document).ready(function () {
    populateSelect('store', stores)
    populateSelect('category', sections)
})

```

Shopping List
Home

Item Name
Quantity
Priority

Store Name
Store Section
Price

Add Item

	Item	Quantity	Store	Section	Price
<input checked="" type="checkbox"/>	Tshirt	2	H&M	Produce	1500
<input type="checkbox"/>	Kajukatli	2	Amul	Produce	100

```

Model .js
'use strict';
class Item {
    constructor(name, quantity, priority, store, section, price) {
        this.name = name;
        this.quantity = quantity;
        this.priority = priority;
        this.store = store;
        this.section = section;
        this.price = price;

        this._purchased = false;
    }

    get purchased() {
        return this._purchased;
    }

    set purchased(nv) {
        this._purchased = nv;
        alert(`${this.name} was purchased`)
    }
}

```

```
}
```

```
}
```

```
class Subject {
```

```
  constructor() {  
    this.handlers = []  
  }
```

```
  subscribe(fn) {  
    this.handlers.push(fn);  
  }
```

```
  unsubscribe(fn) {  
    this.handlers = this.handlers.filter(  
      function(item) {  
        if (item !== fn) {  
          return item;  
        }  
      }  
    );  
  }
```

```
  publish(msg, someobj) {  
    var scope = someobj || window;  
    for (let fn of this.handlers) {  
      fn(scope, msg)  
    }  
  }  
}
```

```
class ShoppingList extends Subject {
```

```
  constructor() {  
    super()  
    this.newItems = []  
    this.oldItems = [];  
  }
```

```
  addItem(it) {  
    this.newItems.push(it)
```

```

        this.publish('newitem', this)
    }
}
Controller.js
var stores = ['H&M', 'Amul', 'Kareems', 'Big Bazaar', 'L&T']
var sections = ['Produce', 'Meats', 'Cereal', 'Canned Goods', 'Frozen Foods', 'Dairy', 'Tools',
'Clothing']

var shoppingModel = new ShoppingList()
var myView = new ShoppingView(shoppingModel)

function clickedon() {
    let rowcolids = ['itemname', 'qty', 'store', 'category', 'price', 'priority']
    let vals = {}
    for (let cid of rowcolids) {
        vals[cid] = document.getElementById(cid).value;
    }
    let it = new Item(vals.itemname, vals.qty, vals.priority, vals.store, vals.category, vals.price)
    shoppingModel.addItem(it)
}

function populateSelect(selectId, sList) {
    let sel = document.getElementById(selectId, sList)
    for (let s of sList) {
        let opt = document.createElement("option")
        opt.value = s
        opt.innerHTML = s
        sel.appendChild(opt)
    }
}

$(document).ready(function () {
    populateSelect('store', stores)
    populateSelect('category', sections)
})
View.js
class ShoppingView {
    constructor(model) {
        model.subscribe(this.redrawList.bind(this))
    }

    redrawList(shoppingList, msg) {
        let tbl = document.getElementById("shoppinglist")

```

```

tbl.innerHTML = ""
for (let item of shoppingList.newItems) {
  this.addRow(item, tbl)
}

addRow(item, parent) {
  let row = document.createElement("tr")
  row.classList.add(item.priority)
  let cb = document.createElement("input")
  cb.type = "checkbox"
  cb.classList.add("form-control")
  cb.onclick = function() { item.purchased = true; }
  row.appendChild(cb)

  for (let val of ['name', 'quantity', 'store', 'section', 'price']) {
    let td = document.createElement("td")
    td.innerHTML = item[val]
    row.appendChild(td)
  }
  parent.appendChild(row)
}
}

```



Shopping List
Home

Item Name
Tshirt
Quantity
1
Priority
low

Store Name
H&M
Store Section
Clothing
Price
1500

Add Item

	Item	Quantity	Store	Section	Price
<input type="checkbox"/>	Tshirt	1	H&M	Clothing	1500

Shopping List

Home

127.0.0.1:5500 says
Tshirt was purchased

OK

Item Name

Tshirt

Quantity

Store Name

H&M

Store Section

Clothing

Price

1500

Add Item

	Item	Quantity	Store	Section	Price
<input type="checkbox"/>	Tshirt	1	H&M	Clothing	1500

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