



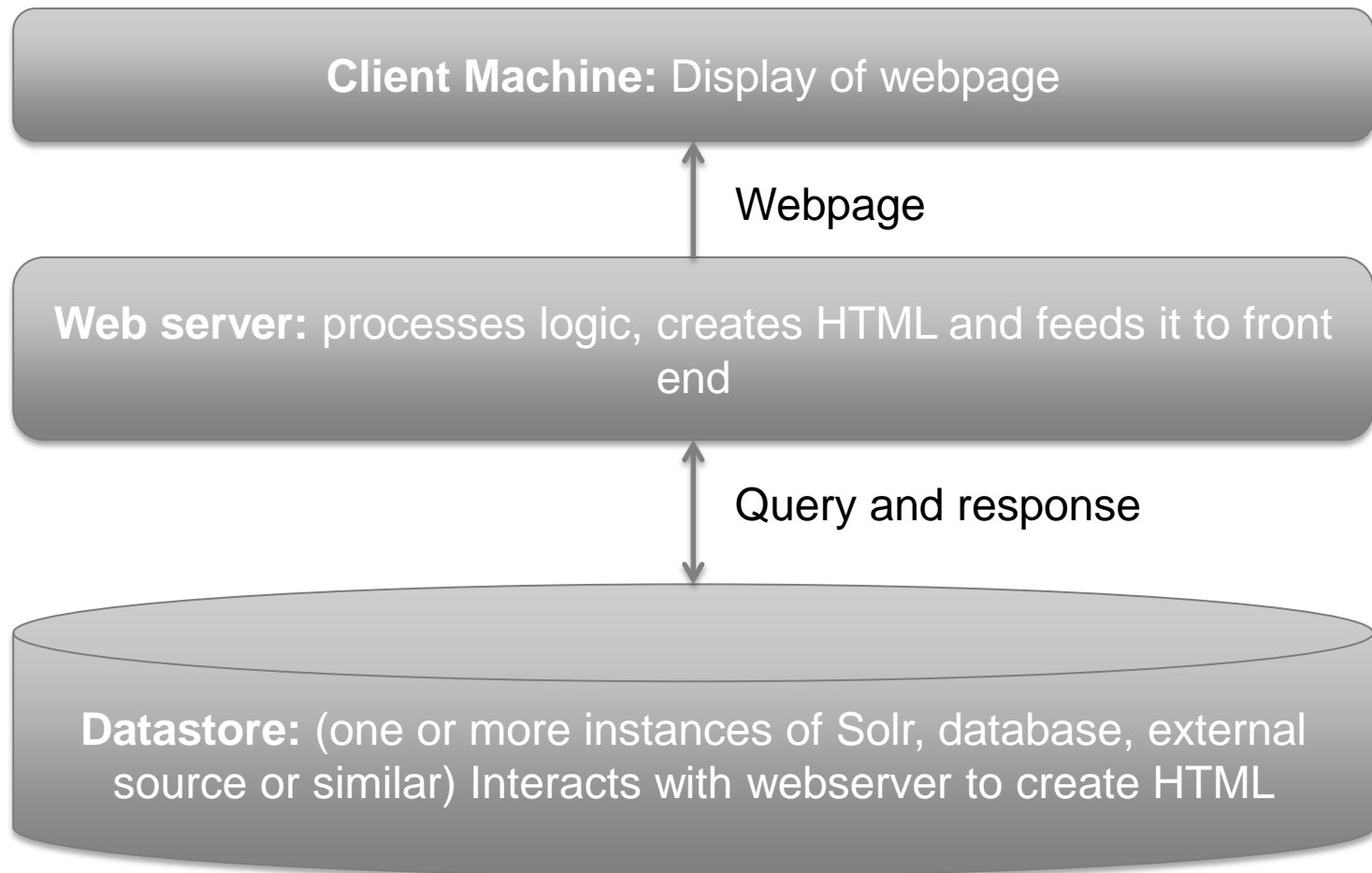
Solr + JavaScript templates = <3

Fergus McDowall
Solr Meetup Oslo
4. Sept 2012

*Props to
Jan and Mahmood!!*

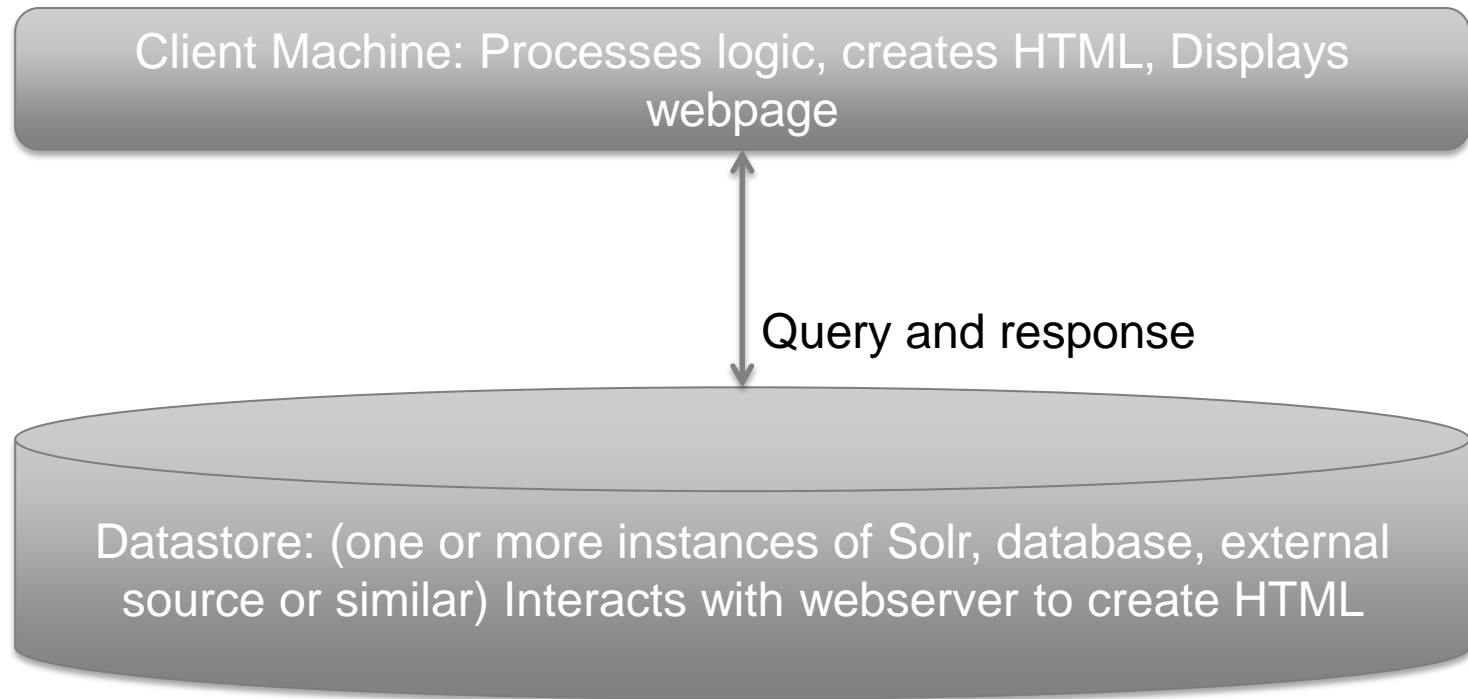
A TRADITIONAL WEB APP

Traditional webapp architecture



A MORE MODERN WEB APP

A more modern webapp architecture



WHY DO WE DO TEMPLATING ON THE FRONT END GENERALLY?

Why use JavaScript for templating?



Advantages

- Fast
- Fewer layers of abstraction
- More control over display
- Less central processing, fewer servers required, cost savings
- Enables cool web2.0 functionality such as instant search etc...
- Enables responsive design for mobile, tablet, etc...

Disadvantages

- Security
- SEO
- Access key issues
- More HTTP requests per pageview

JAVASCRIPT TEMPLATING LIBRARIES

Popular Javascript templating libraries

- John Resigs micro-templating - <http://ejohn.org/blog/javascript-micro-templating/>
- Handlebars - <http://tryhandlebarsjs.com/>
- Mustache - <http://mustache.github.com/>

SETTING UP SOLR FOR JS TEMPLATING

Setting up Solr for JS templating

- Nothing! Since Solr has built in JSON functionality, it can be plugged directly into javascript.
- But... have a think about security.



Solr JSON feed:

```
{
  "responseHeader":{
    "status":0,
    "QTime":1,
    "params":{
      "json.wrf":"?",
      "indent":"true",
      "q":"ford",
      "wt":"json"}},
  "response":{"numFound":3,"start":0,"docs":[
    {
      "id":"147",
      "name":"Ford Capri",
      "description":"pink 1978 model- great condition",
      "owner":"576463865",
      "store":"59.7440738,10.204456400000026",
      "tags":[
        "Ford, Capri, Pink, 1978"]},
    {
      "id":"148",
      "name":"Ford Orion",
      "description":"Blue, Good runner",
      "owner":"576463865",
      "store":"59.9138688,10.752245399999993",
      "tags":[
        "blue, orion, 1.6"]},
    {
      "id":"149",
      "name":"Ford Anglia",
      "description":"As seen in Harry Potter, Can be
      flown",
      "owner":"576463865",
      "store":"57.2366283,-2.2650615999999673",
      "tags":[
        "Harry Potter, Anglia, Flying car"]}
  ]
}
```

A web page with JavaScript templates

```
<div id="rs"></div>
<script type='text/javascript' src='//ajax.googleapis.com/ajax/libs/jquery/1.4.2/jquery.js'></script>
<script type='text/javascript'>
$.getJSON("http://localhost:8080/solr/select/?q=ford&wt=json&json.wrf=?&indent=true", function(result){
var Parent = document.getElementById('rs');
for (var i = 0; i < result.response.docs.length; i++) {
var thisResult = "<b>" + result.response.docs[i].name + "</b><br>" + result.response.docs[i].description
+ ", " + result.response.docs[i].tags + "<br>";
var NewDiv = document.createElement("DIV");
NewDiv.innerHTML = thisResult;
Parent.appendChild(NewDiv);
}
});
</script>
```

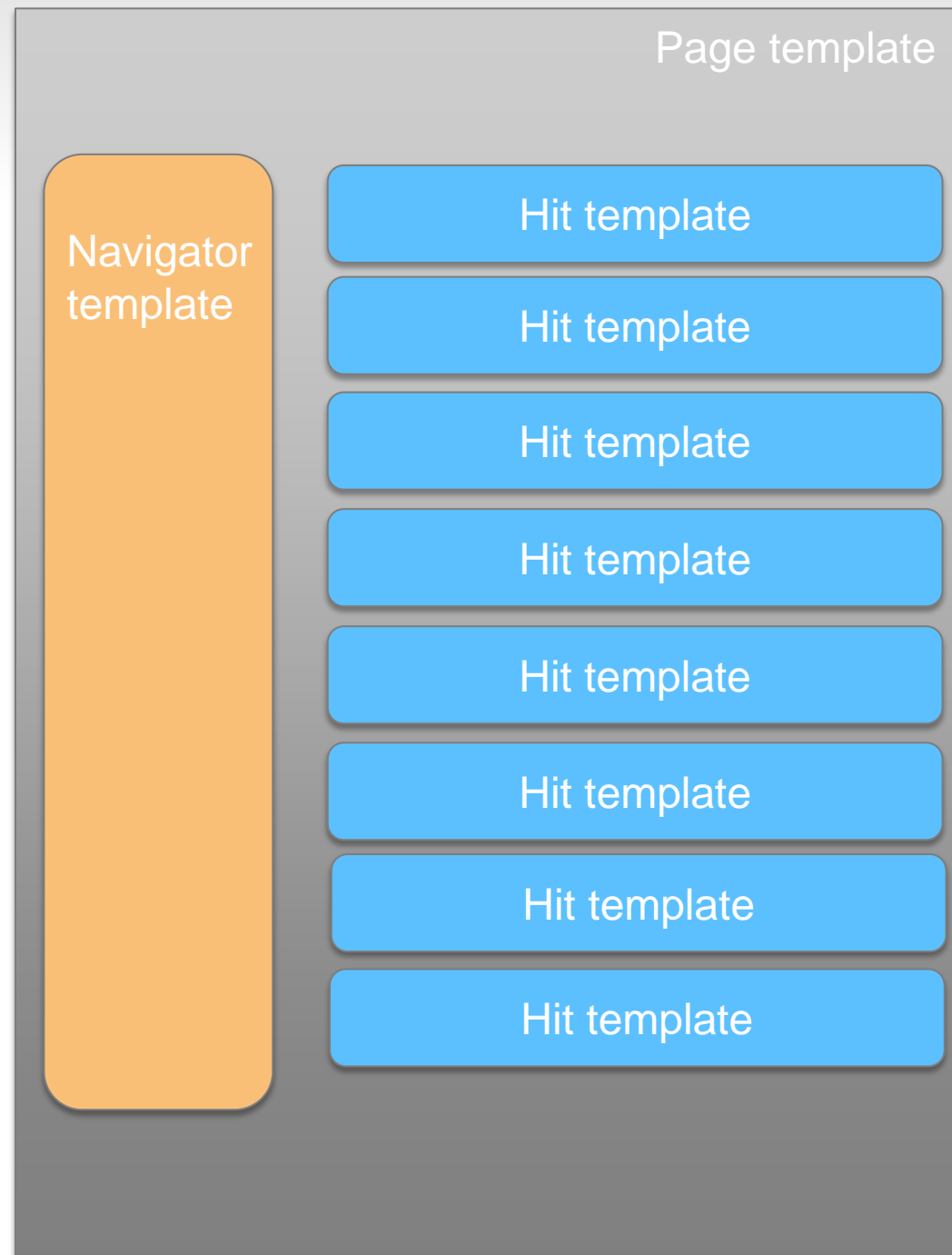
Browse Reuters business news from 1987

```
<input id="searchterm" />
<button id="search">search</button>
<div id="rs"></div>
<script src="//ajax.googleapis.com/ajax/libs/jquery/1.8.0/jquery.min.js"></script>
<script type='text/javascript'>
$("#search").click(function(){
    $("#rs").empty();
    $.getJSON("http://evolvingweb.ca/solr/reuters/select?q=" + $("#searchterm").val() + "&w\
t=json&json.wrf=?&indent=true", function(result){
    var Parent = document.getElementById('rs');
    for (var i = 0; i < result.response.docs.length; i++) {
        var thisResult = "<b>" + result.response.docs[i].title + "</b><br>" + result.respons\
e.docs[i].dateline
        + ", " + result.response.docs[i].text + "<br>";
        var NewDiv = document.createElement("DIV");
        NewDiv.innerHTML = thisResult;
        Parent.appendChild(NewDiv);
    }
    });
});
</script>
```

A TEMPLATING STRATEGY (HIGH LEVEL)



Templating Strategy



FURTHER READING

Further reading:

- <http://blog.comperiosearch.com/author/fmcdowall/>
- <http://jquery.com/>
- <http://evolvingweb.github.com/ajax-solr/>
- <http://evolvingweb.github.com/ajax-solr/examples/reuters/index.html>
- <http://www.mcdowall.no/TEMPDEMOS/solrdemo.html>

Q&A:

Fergus McDowall

fergus.mcdowall@comperiosearch.com

<https://twitter.com/fergiemcdowall>

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