Charles
Severance
www.dj4e.com

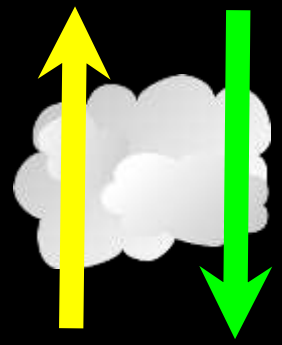
Model View Controller (MVC)

Web Server

80

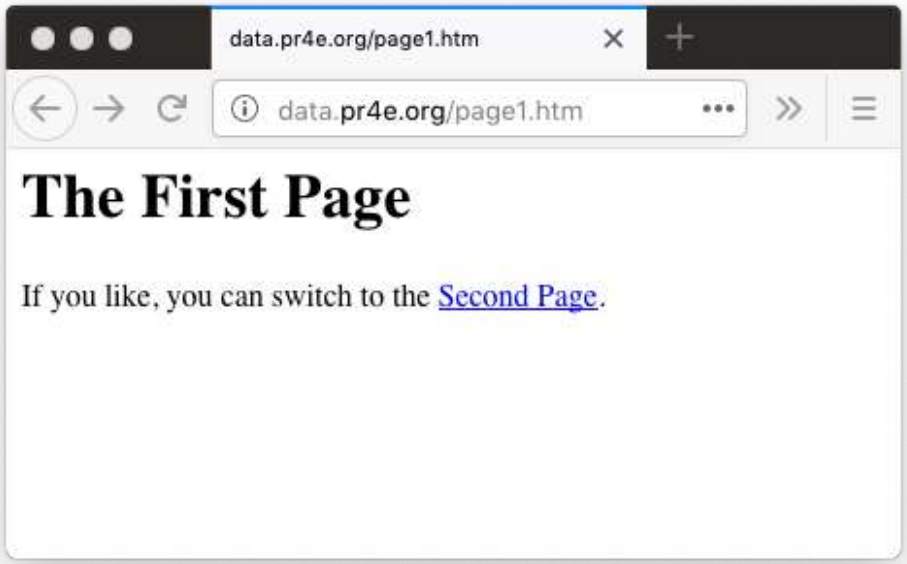
Request

GET http://data.pr4e.org/page2.htm



Response

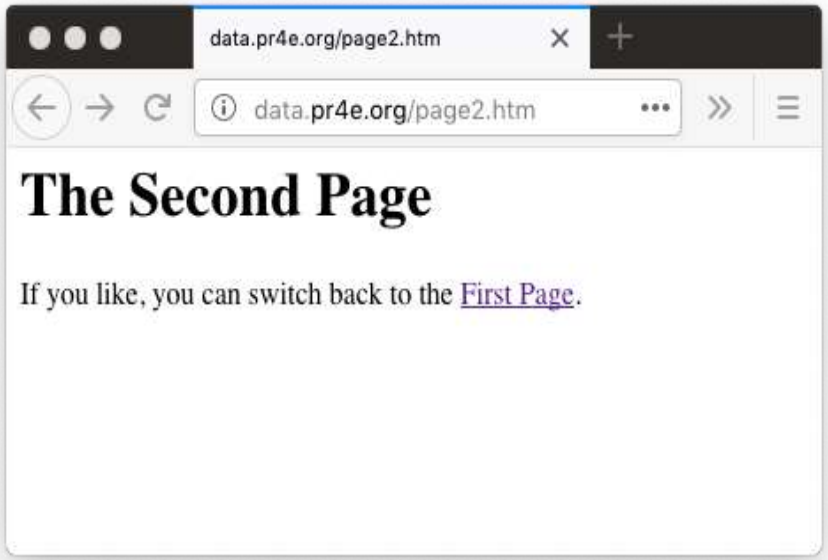
```
<h1>The Second Page</h1>
<p>If you like, you can switch back to the
<a href="page1.htm">First Page</a>.</p>
```



Browser App

Click

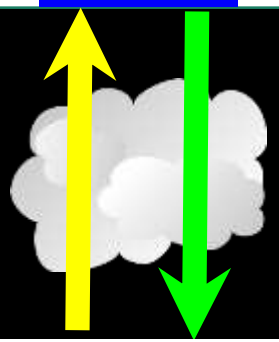
Parse/ Render



Web Server

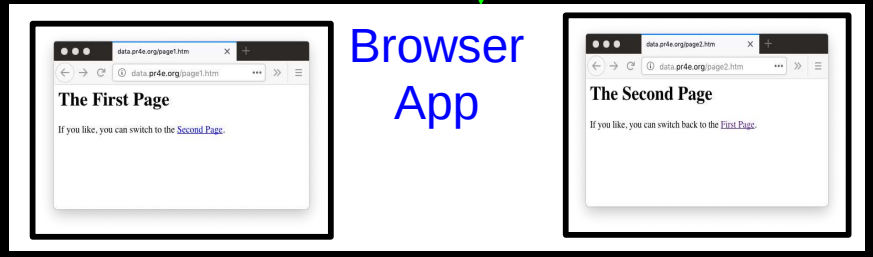
?????

80



Request

GET
http://data.pr4e.org/page2.htm

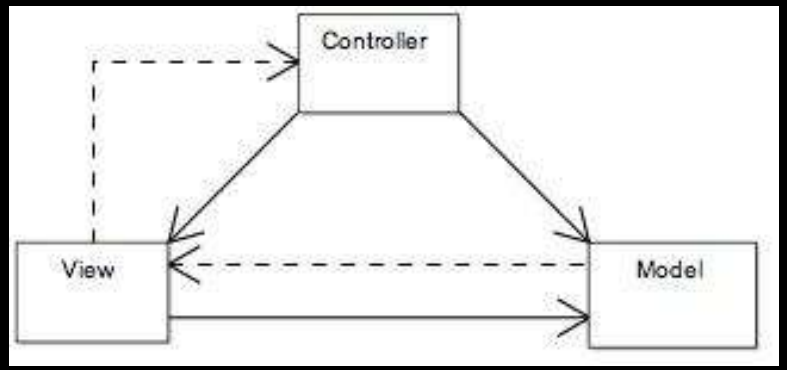


Response

<h1>The Second Page</h1> If you like, you can switch back to the <a href="page1.htm">First Page</a>.

Model-View-Controller

"In MVC, the model represents the information (the data) of the application and the business rules used to manipulate the data; the view corresponds to elements of the user interface such as text, checkbox items, and so forth; and the controller manages details involving the communication to the model of user actions."



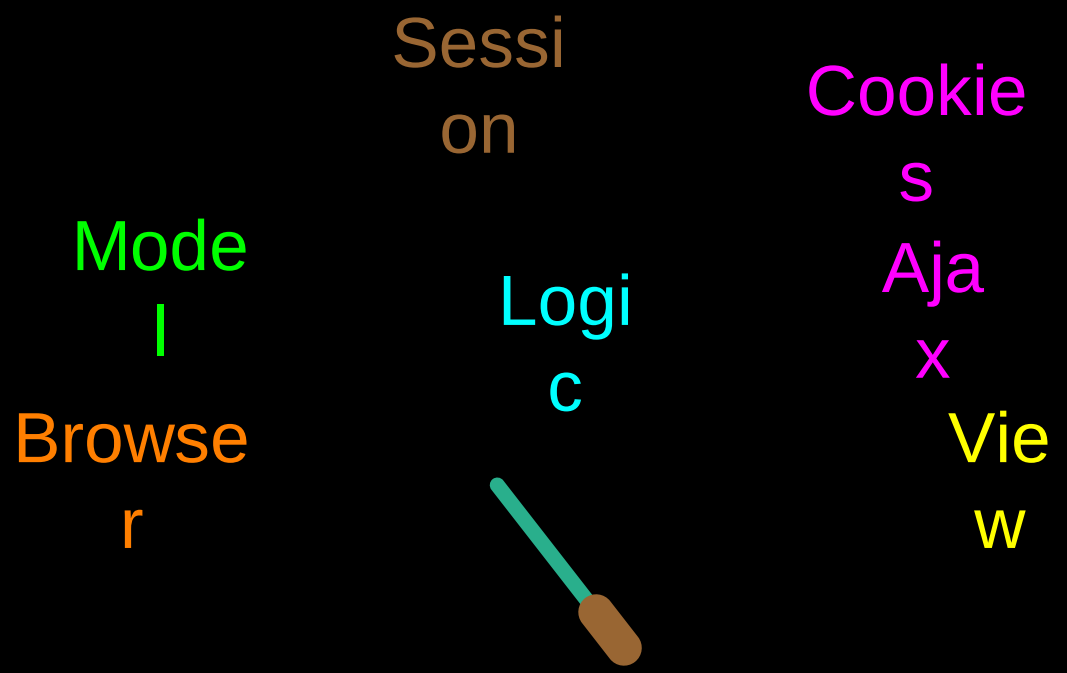
http://en.wikipedia.org/wiki/Model-View-Controller

Model View Controller

- We name the three basic functions of an application as follows
  - Controller - The code that does the thinking and decision making
  - View - The HTML, CSS, etc. which makes up the look and feel of the application
  - Model - The persistent data that we keep in the data store

http://en.wikipedia.org/wiki/Model-view-controller

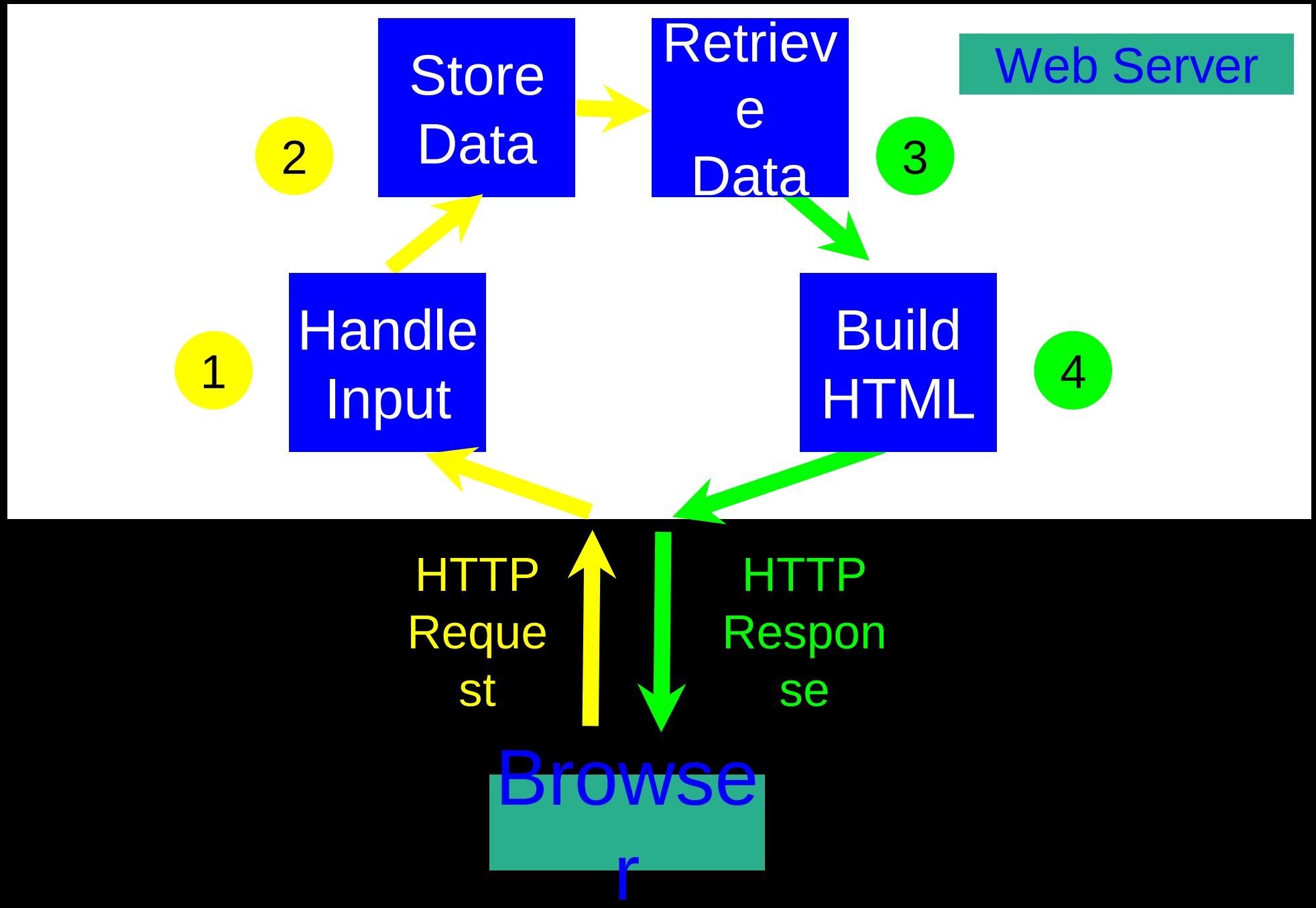
Controller “Orchestrates”

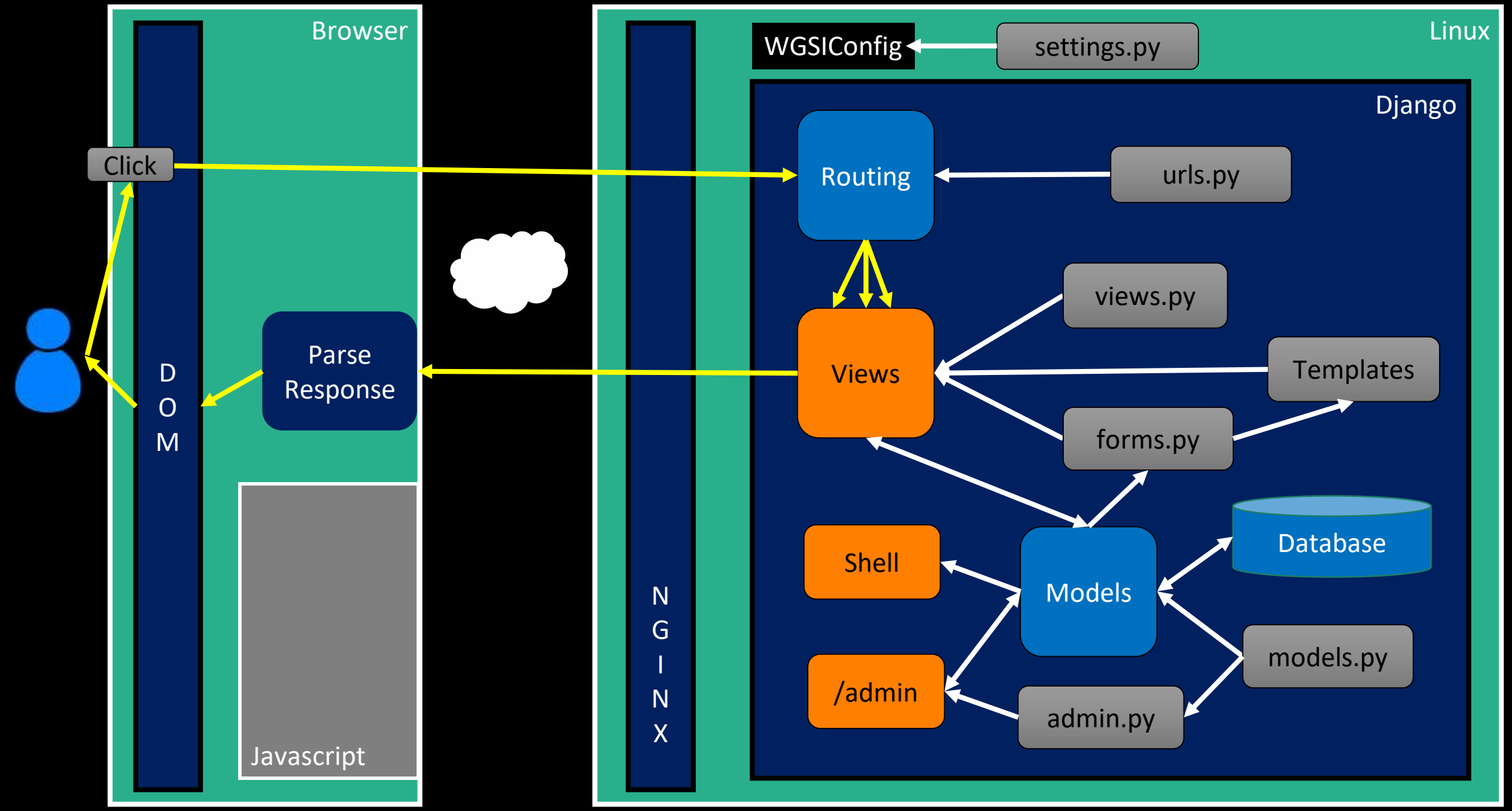


The controller is the conductor of all of the other aspects of MVC.

Tasks Inside the Server

- Process any user input data (i.e. from a form) - possibly storing it in a database or making some other change to the database such as a delete
- Decide which screen to send back to the user
- Retrieve any needed data
- Produce the HTML response and send it back to the browser (i.e. a template)


Web Server
Store Data
Retrieve Data
Handle Input
Build HTML
1
2
3
4
HTTP Request
HTTP Response
Browser


Browser
Linux
WGSIConfig
settings.py
Django
Click
Routing
urls.py
views.py
Templates
Parse
Response
Views
forms.py
D
O
M
Shell
Models
Database
models.py
/admin
admin.py
N
G
I
N
X
Javascript

Summary

- We call the Data bit - the “Model” or Data Model
- We call the “making the next HTML” bit the “View” or “Presentation Layer”
- We call the handling of input and the general orchestration of it all the “Controller”

Acknowledgements / Contributions

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Initial Development: Charles Severance, University of Michigan School of Information

Insert new Contributors and Translators here including names and dates

Continue new Contributors and Translators here