



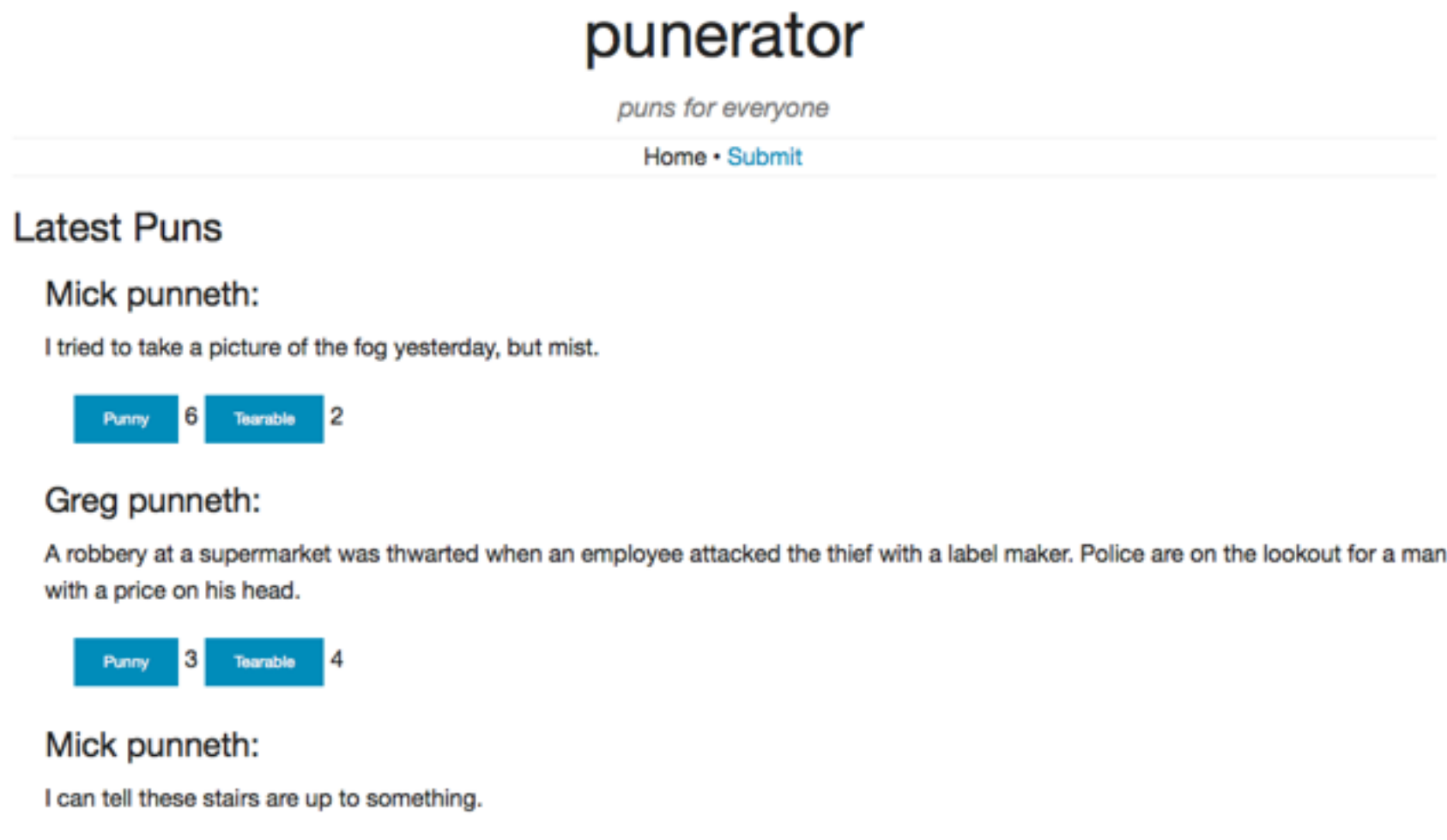
Building your Web Application Muscles with Lift

Matt Farmer
May 6th, 2015

Sorry, I was sick.

Tonight's Demonstration

- A site for submitting and voting on puns.
- URL: <http://punerator.frmr.me>
- Source: <https://github.com/farmdawgnation/punerator>



Lift is a bit different.

The Seven Things

1. Lazy Loading
2. Parallel Page Rendering
3. Comet and AJAX
4. Wiring
5. Designer-friendly Templates
6. Wizard
7. Security

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Designer-friendly Templates

Lift is not an MVC framework.

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No, I'm not insane.

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Well, maybe a little but not completely.

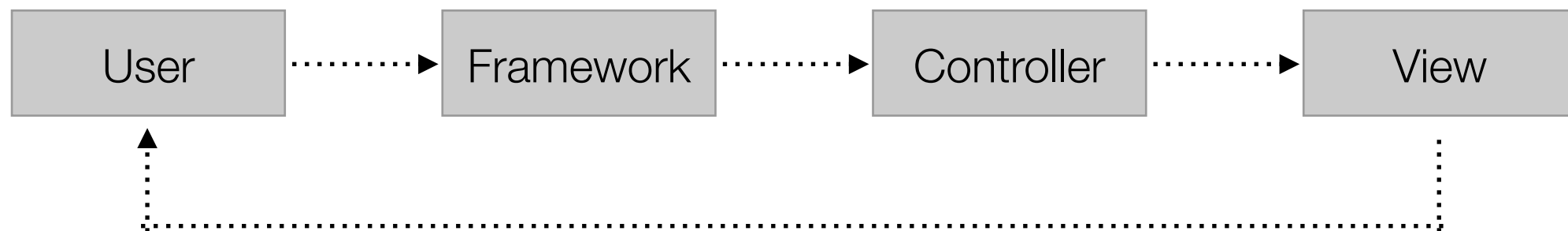


View First

MVC vs. View First

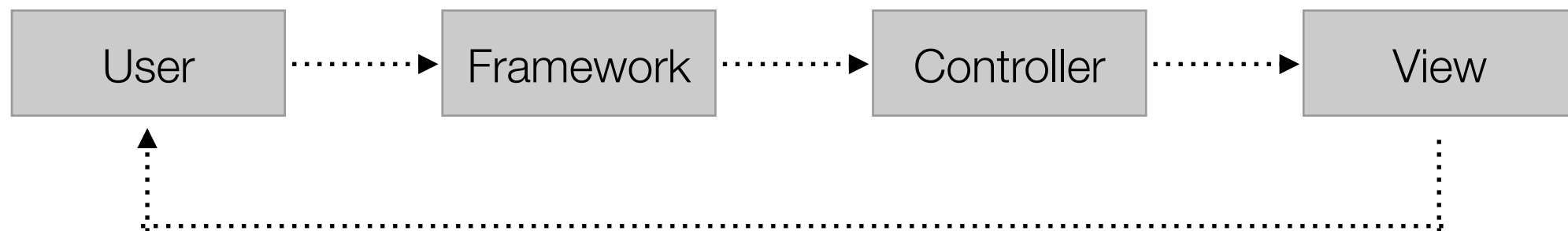
MVC vs. View First

Typical MVC Framework

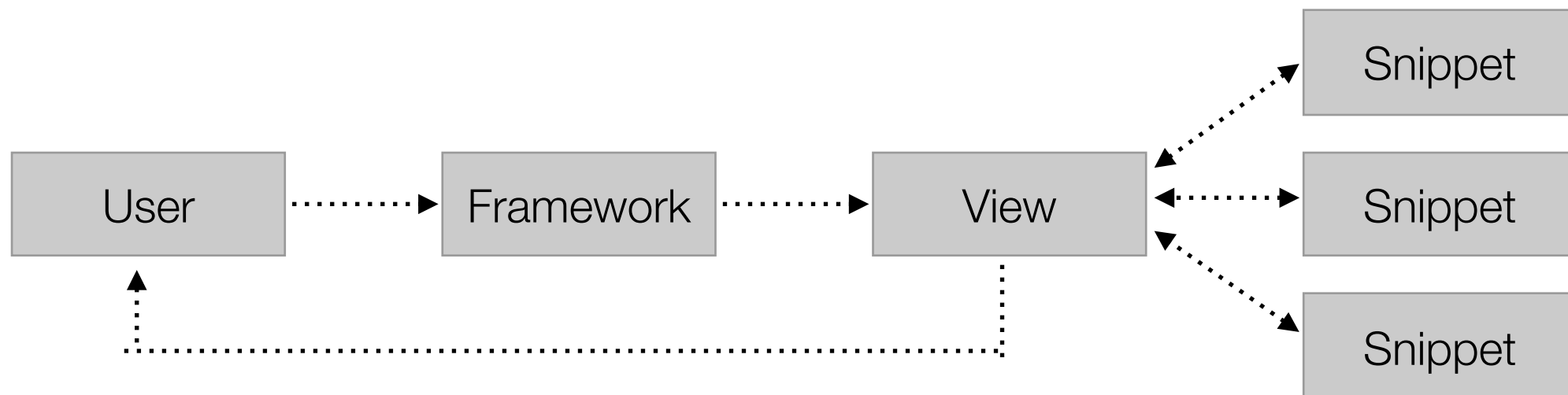


MVC vs. View First

Typical MVC Framework



Lift



View First

Snippet (NodeSeq) => NodeSeq

View First

Snippet (NodeSeq) => NodeSeq

CSS Transforms

View First

Snippet (NodeSeq) => NodeSeq

CSS Transforms



View First

Snippet (NodeSeq) => NodeSeq

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View First

Snippet (NodeSeq) => NodeSeq

CSS Transforms Magic

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CSS Transforms Magic

DSL (Domain Specific Language)

View First

Snippet (NodeSeq) => NodeSeq

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DSL (Domain Specific Language)

`“.date *” #> invoice.date`

View First

Snippet (NodeSeq) => NodeSeq

CSS Transforms Magic

DSL (Domain Specific Language)

“.date *” #> invoice.date



CSS Selector

View First

Snippet (NodeSeq) => NodeSeq

CSS Transforms Magic

DSL (Domain Specific Language)

“ <code>.date *</code> ”	#>	<code>invoice.date</code>
<div></div>		<div></div>
CSS Selector		Content

View first

View first

- Lift templates are just HTML.

View first

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- Lift finds things to change using CSS selectors.

View first

- Lift templates are just HTML.
- Lift finds things to change using CSS selectors.
- Any designer who understands HTML and CSS can make changes relatively safely.

Let's see some code.

Push to the Browser



COMETS!

Why not WebSockets?

[https://groups.google.com/d/msg/liftweb/
1fa3rolbnvl/enV5CFm2Rd4J](https://groups.google.com/d/msg/liftweb/1fa3rolbnvl/enV5CFm2Rd4J)

Push to the Browser

Push to the Browser

- What if we could represent the page a user's browser is viewing as an actor?

Push to the Browser

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CometActor

Actors, but for pages

Browser

CometActor

Actors, but for pages



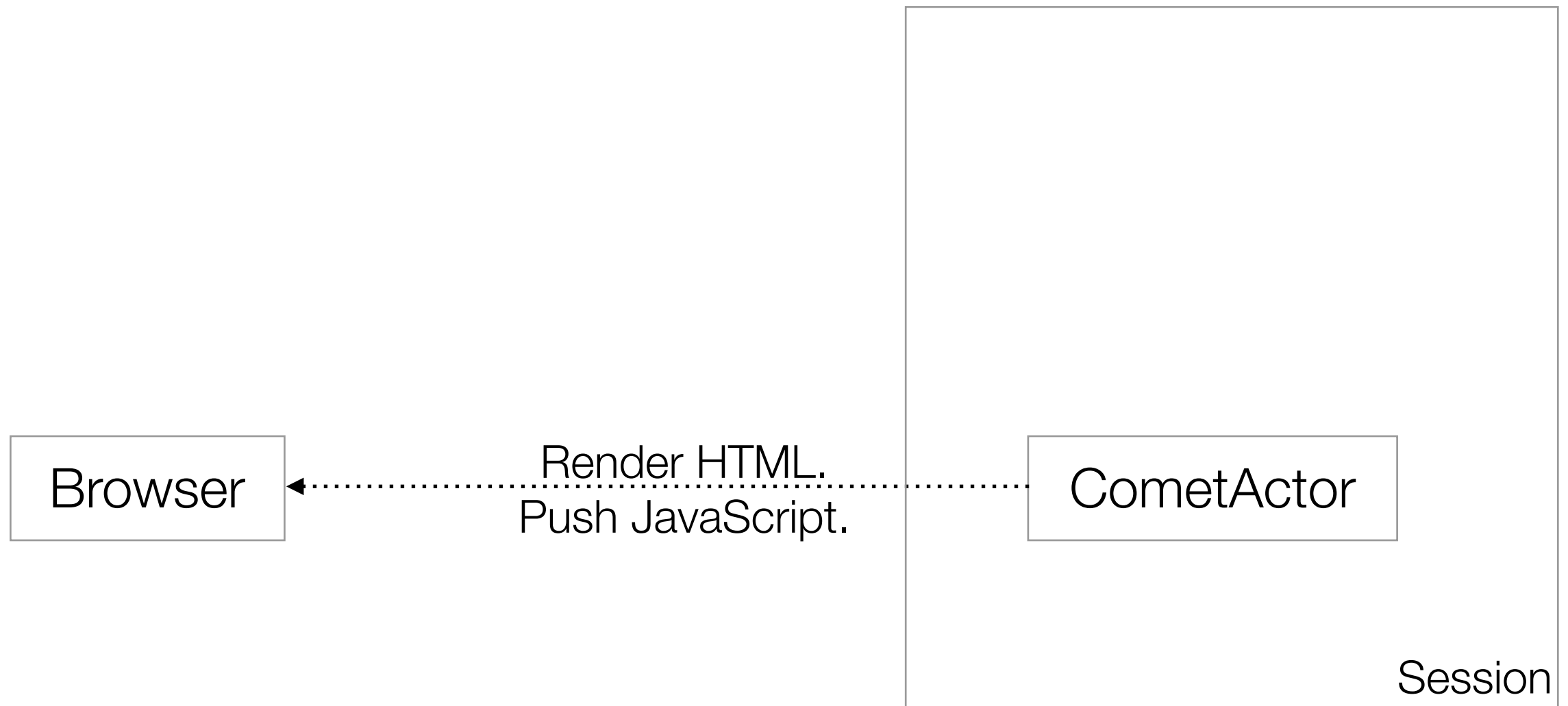
Actors, but for pages



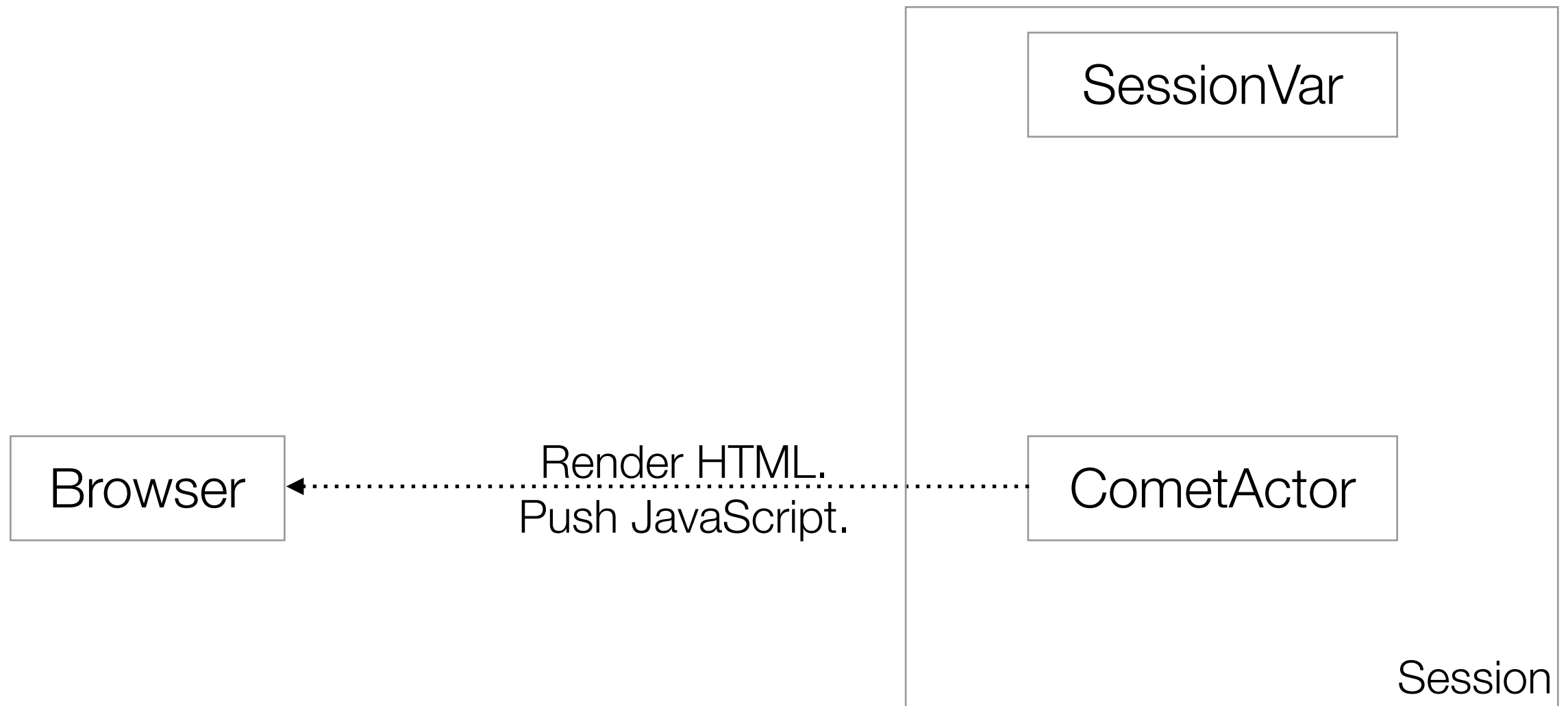
Actors, but for pages



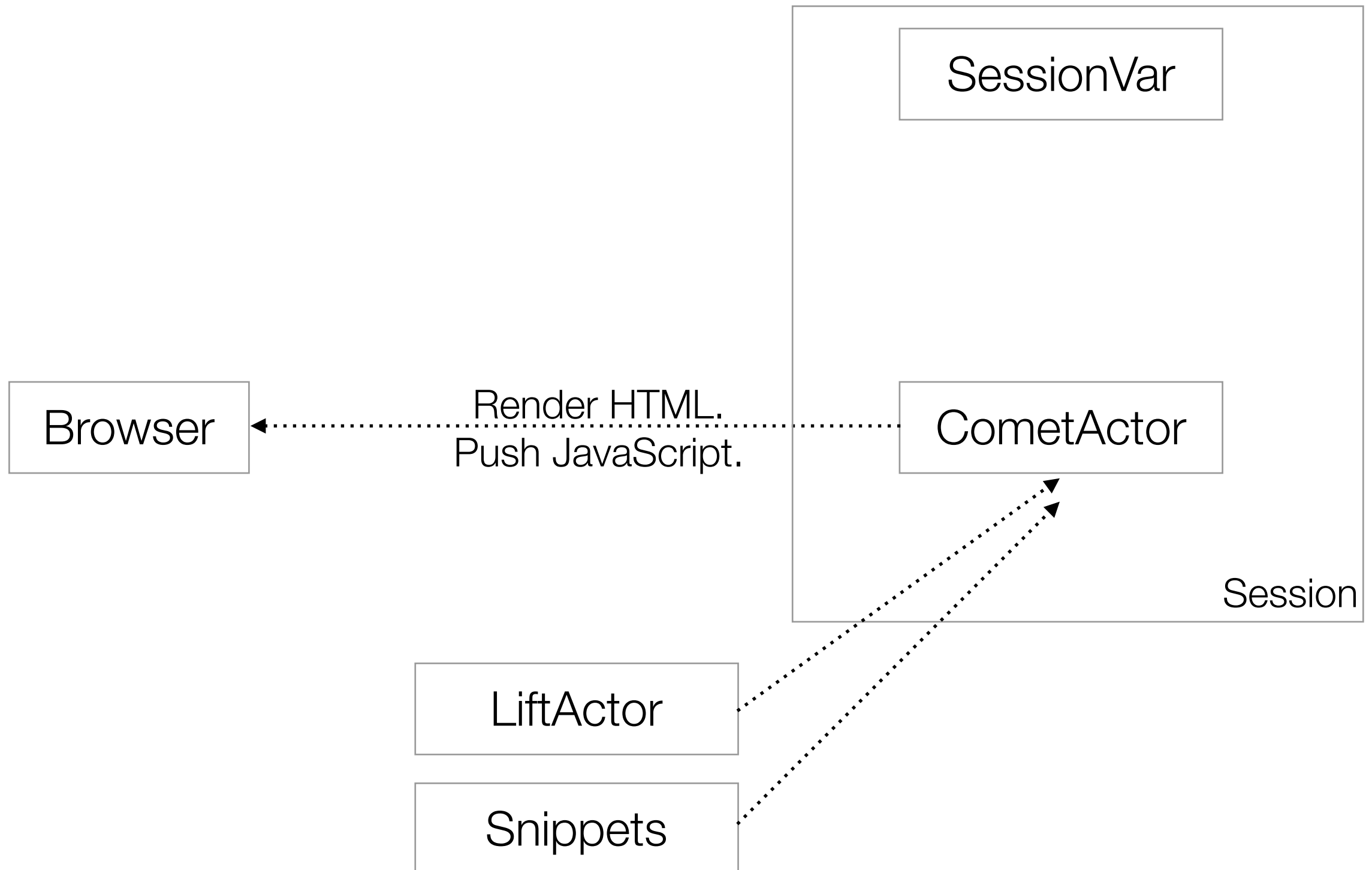
Actors, but for pages



Actors, but for pages



Actors, but for pages



Lift handles the magic

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- Loading the relevant client side bits.

Lift handles the magic

- Loading the relevant client side bits.
- Detecting when a CometActor isn't needed.

Lift handles the magic

- Loading the relevant client side bits.
- Detecting when a CometActor isn't needed.
- Handling connectivity issues.

Let's see some code.

Further reading

- The Lift Website <http://liftweb.net>
- Lift Template Projects https://github.com/lift/lift_26_sbt
- The mailing list <http://groups.google.com/group/liftweb>
- The Seven Things: <http://seventhings.liftweb.net>
- The Lift Cookbook: <http://cookbook.liftweb.net>

Thank you.

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- “Big Weight” <https://www.flickr.com/photos/ennuidesign/2715836520>
- “Are your eyeballs running?” <https://flic.kr/p/4HbQj2>
- “Comet Panstarrs March 2nd 2013” <https://flic.kr/p/dZdD7k>