

# Learn To Love the Front End

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**“Just because nobody  
complains doesn’t mean all  
parachutes are perfect”**

**-Benny Hill**

**Front-end design**  
**vs**  
**Front-end web development**

**Front end design:  
How do we make it pretty?\***



# Front-end web development: How do we make it work?



**\*The user experience person  
Controls the blending of the look and feel  
Awesome ones know the code side  
and know the design side**



**Very different from the old days  
of static web development**

**Interactive web applications  
have changed the game**



# Ryan Stewart



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**Based in Seattle**

**Things I Like:**

**Beer**

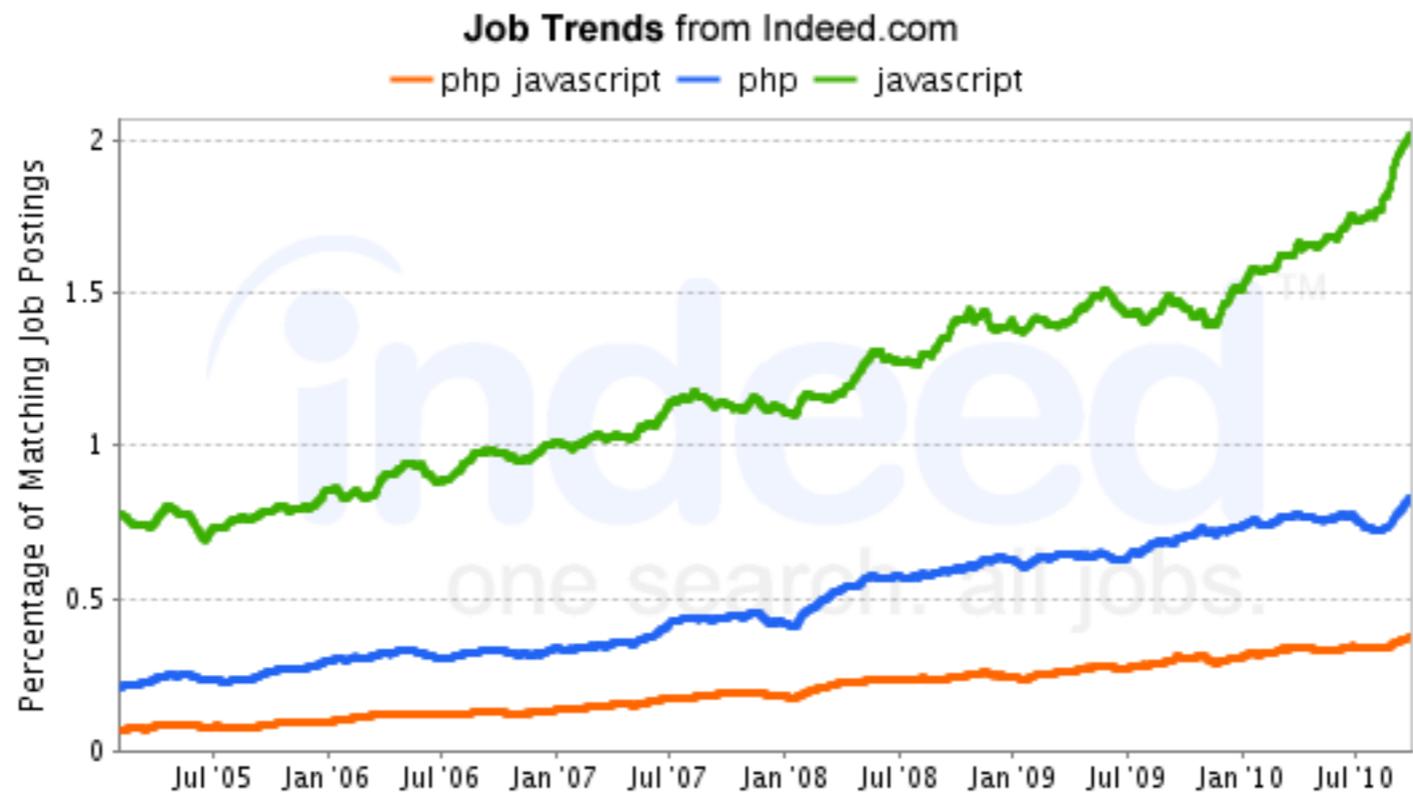
**Mountaineering/Hiking/Backpacking**

**Geolocation/Mapping stuff**

# Agenda:

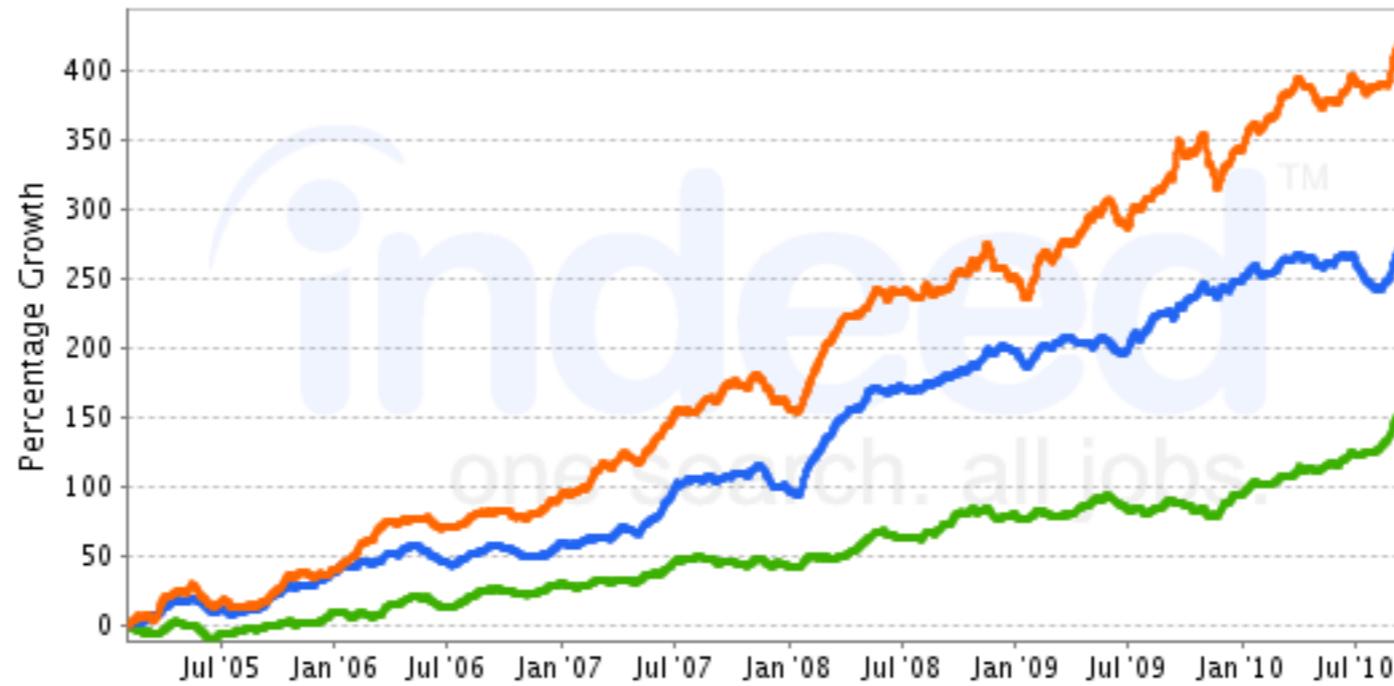
**Why you should love the front end**  
**Creating interactive web apps with JavaScript/HTML**  
**Flash as a next step**

**Why is this your responsibility?**

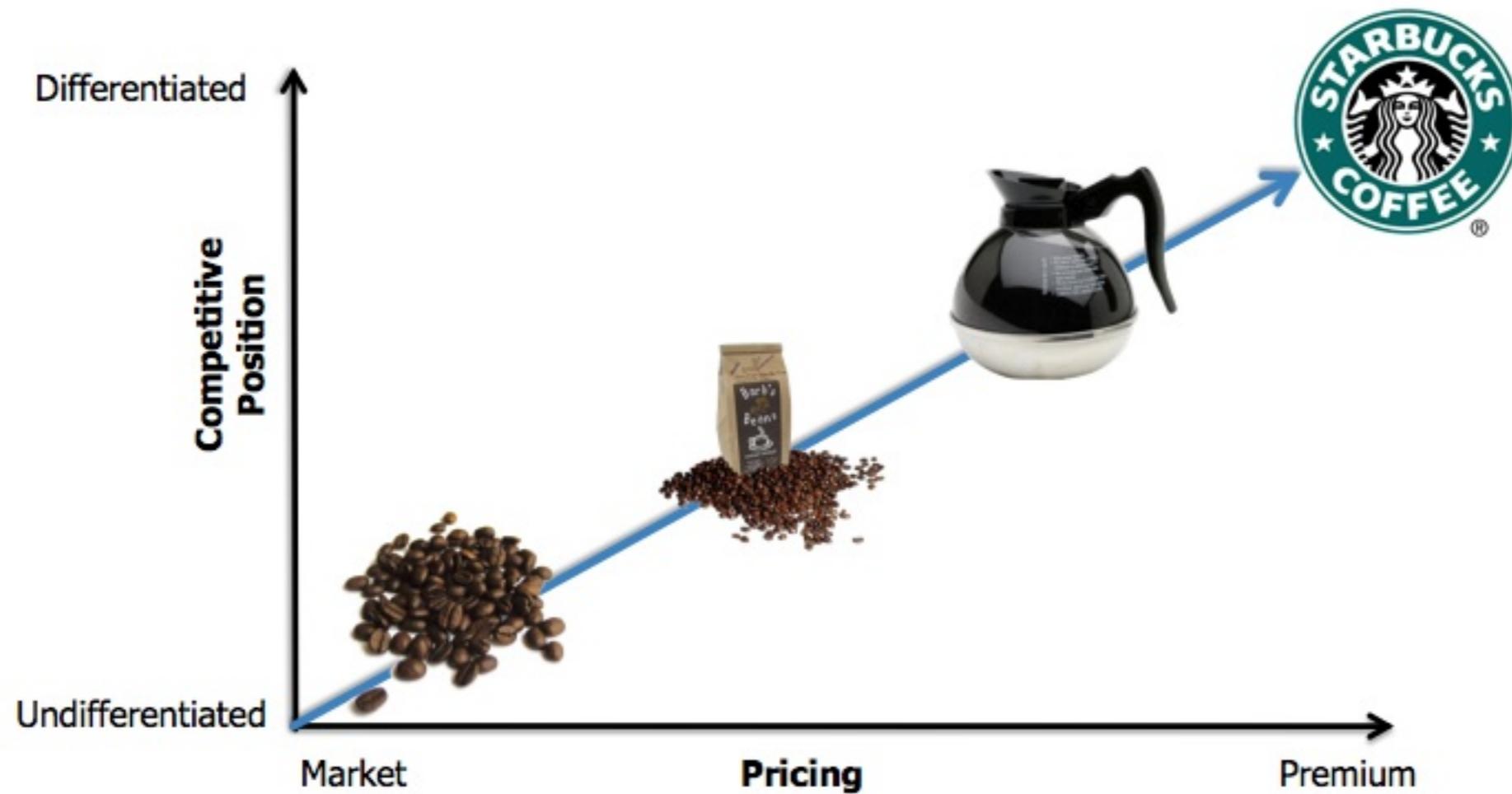


### Job Trends from Indeed.com

— php javascript — php — javascript



# The Experience Economy



# 4 Types of Business

**A commodity business charges for undifferentiated products.**

**A goods business charges for distinctive, tangible things.**

**A service business charges for the activities you perform.**

**An experience business charges for the feeling customers get by engaging it**

# The Experience Economy and Beer

## The commodity: Malted Barley



**Undifferentiated product: cost per beer  $\approx$  \$.25**

# The good: Generic Beer



Distinctive, tangible thing: cost per beer  $\approx$  \$1

## The service: Microbrews



**Extra activities: cost per beer  $\approx$  \$1.50**

# The Experience: The Brewpub



# The Experience: The Brewpub

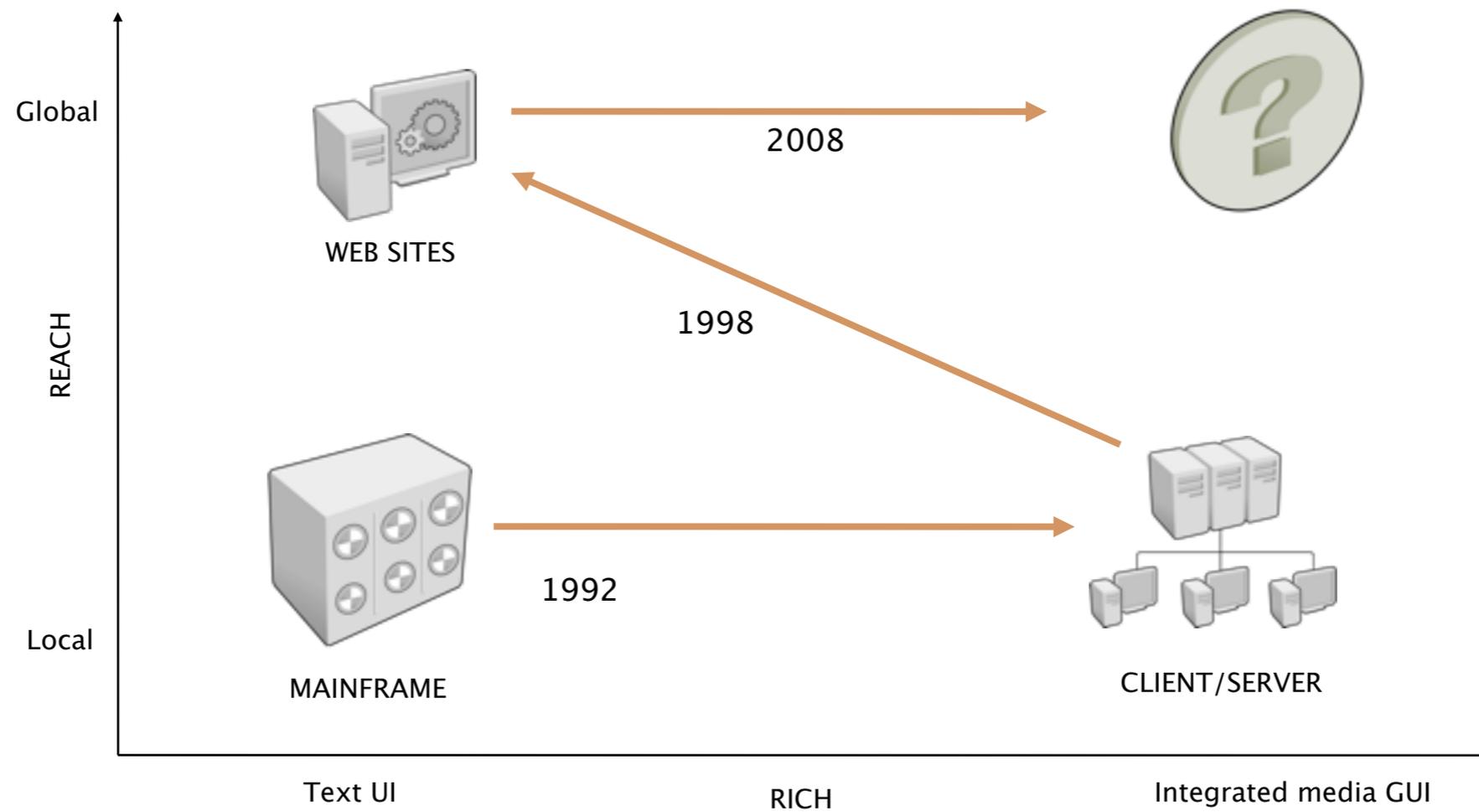


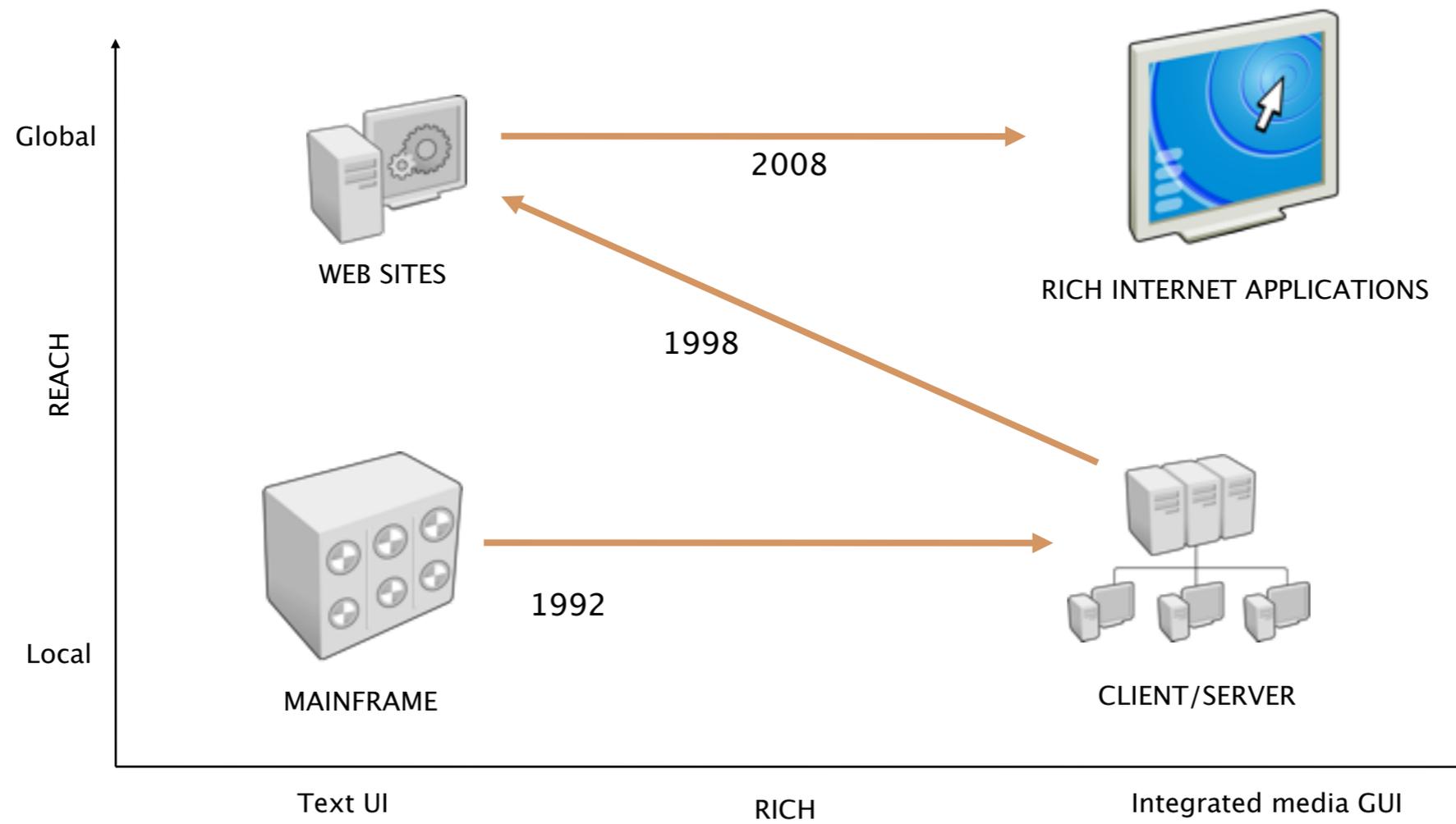
**Charging for feelings: cost per beer  $\approx$  \$4.00**

**Where do you fit?**

**Without the front end you're  
quickly becoming the commodity**

**Where do we start?**





**Bring the desktop metaphors  
to the web**

**Drag and drop**  
**Complex components**  
**No page refresh**

# Starting off on the client: Turning boring HTML into a web application

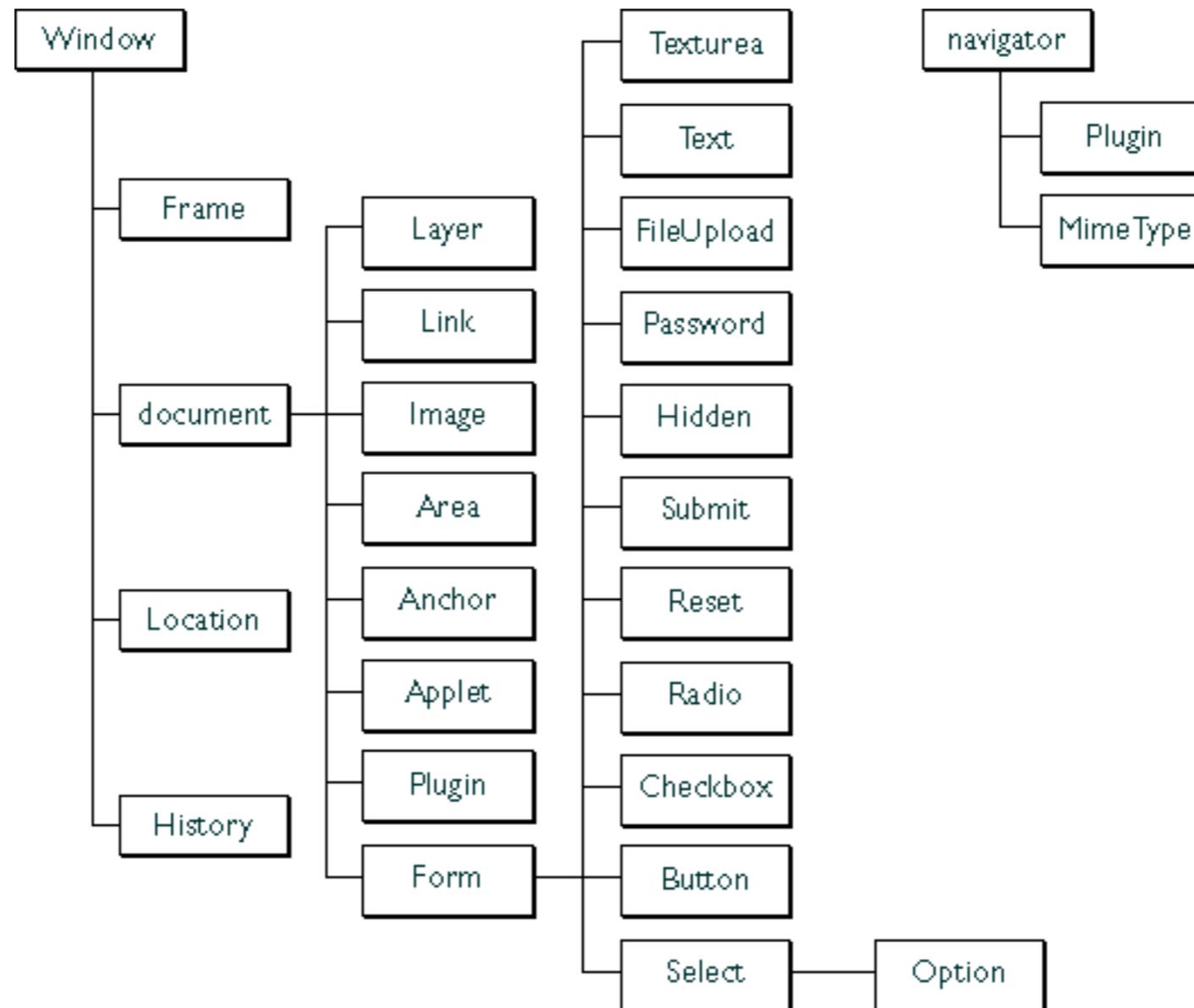
The screenshot shows a web browser window with the address bar containing the URL: `rainier.cascade.mtn/codeworks2010/jquery/selectors/`. The browser's bookmark bar includes links to Techmeme, Economist.com, My Ballard, Washington Beer Blog, Stack Overflow, and Planet PHP. The main content area displays a table of mountain peaks with the following data:

ID	Name	Elevation	Latitude	Longitude	Prominence	Range	Isolation	State	WA State Bulger List
1	Mount Rainier	14411	46.8529014587	-121.760002136	13	South Washington Cascades	731.200012207	WA	Yes
2	Mount Shasta	14162	41.4090003967	-122.194999695	9822	California Cascades	334.700012207	CA	No
3	Liberty Cap	14112	46.8629989624	-121.775001526	472	South Washington Cascades	0.800000011921	WA	No
4	Shastina	12330	41.4093017578	-122.222999573	450	California Cascades	1.5	CA	No
5	Mount Adams	12276	46.2024993896	-121.490997314	8116	South Washington Cascades	45.7999992371	WA	Yes
6	Mount Hood	11239	45.373500824	-121.695999146	7706	Oregon Cascades	57.2999992371	OR	No
7	Little Tahoma	11138	46.8497009277	-121.711997986	818	South Washington Cascades	2.09999990463	WA	Yes
8	Mount Baker	10781	48.7767982483	-121.814002991	8812	North Cascades	131.5	WA	Yes
9	Glacier Peak	10520	48.1118011475	-121.113998413	7498	North Cascades	56	WA	Yes
10	Mount Jefferson	10497	44.6743011475	-121.800003052	5777	Oregon Cascades	48.0999984741	OR	No
11	Lassen Peak	10457	40.4882011414	-121.504997253	5229	California Cascades	71.4000015259	CA	No
12	South Sister	10358	44.1035003662	-121.768997192	5598	Oregon Cascades	39.4000015259	OR	No

# HTML, JavaScript, CSS: The trifecta of crazy



# First problem: Managing the DOM



**The key to being able to create a web application  
is the ability to manipulate the DOM.**

# Problem two: Dealing with cross-browser issues



**HTML and JavaScript often work differently  
in different browsers.**

**JavaScript frameworks take  
care of a lot of this burden**





# Using jQuery to enhance the experience



# The beauty of progressive enhancement

**What do you do when the user has JS  
turned off or their browser doesn't support it?**



**Progressive enhancement allows us to  
add interactivity while leaving the core  
functionality and data intact**

Using  **jQuery**  
*write less, do more.*

# Manipulating the DOM: Selectors

**What about CSS3?**

**CSS3**

# Animation with jQuery

# **Adding some desktop-ish functionality to our table**

# jQuery's beautiful not-so-secret: Plugins

Show  entries

Search:

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Showing 1 to 10 of 370 entries

← →

**Pixel-perfect experience**  
**Real-time Data**  
**Rich Visualizations**  
**Instant Collaboration**



**These are things the Flash Player  
was built to solve**

# Be cautious with Flash



**Flex was created to bring  
that to developers**



# Data visualization with Flex



# Real-time collaboration

**Adobe has a service called  
LiveCycle Collaboration Services**

**The goal is to easily enable  
real-time collaboration  
in any Flex/Flash application**

# **Building a collaborative whiteboard with video and text chat in 30 lines of code**

**Front end development can  
be a lot of fun**

# Thank you! Questions?



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