The Top 10 JavaScript Frameworks, and the Communities Behind Them

Dave Gruber
Black Duck
About me

By day... Black Duck

By night... classic rocker
About this session

- A statistics-based session, comparing the communities behind the leading JavaScript framework projects
- An attempt to add an additional perspective into your choice of technology
- NOT a feature comparison
- NOT an attempt to choose the best framework
About the data
Fastest Growing Languages

Monthly Commits (% of total for all languages)

Source: Ohloh
New Projects in 2013 - Primary Language Used

~9k New Projects

- Javascript: 32%
- Python: 9%
- Java: 9%
- Ruby: 11%
- PHP: 9%
- All Other: 11%
JavaScript Frameworks – The Need for Architecture

• Front-End MVC Frameworks
  • Angular, Backbone, Ember, Knockout
  • Sproutcore, Spine, CanJS, Flight

• Full Stack Frameworks
  • Meteor, Mojito, Derby

• Single Page App Frameworks
  • DurandalJS, batman.js
The Collective Monthly Developer Effort

# of People Contributing Each Month

In 2013, Angular and Ember communities saw significant growth.
Monthly Contributors Trend

What about Backbone?
Ecosystem - Related Projects

Examples:
- ChaplinJS
- Backbone Marionette
Separating out Full Stack Solutions

- Meteor.JS
- Yahoo! Mojito
- Derby
GitHub Star Rating

Note Meteor’s Popularity!

* Used as an indicator of popularity
Note that while CanJS still has significant contributions, popularity has not caught up.
Lines of Code and the Total Community Size
Total Commits and Total Lines of Code
Factoring Community into your Next Technology Decision

- Community size and growth rate can show momentum, but doesn’t always tell the story.
- Activity levels always matters, but varies based on the age and maturity of a project.
- Comparing like projects can show where the community investment is going.
- Your mileage may vary. Just because something is popular doesn’t mean it’s the right choice for your situation.
- This data is all readily available.
## Compare Projects

### General

<table>
<thead>
<tr>
<th>Project</th>
<th>Activity</th>
<th>Updated</th>
<th>Website</th>
<th>License</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>AngularJS</td>
<td>Very High</td>
<td>1 day ago</td>
<td>angularjs.org</td>
<td>MIT</td>
<td>$2,458,064</td>
</tr>
<tr>
<td>Ember.js</td>
<td>Very High</td>
<td>about 11 hours ago</td>
<td>emberjs.com</td>
<td>MIT</td>
<td>$753,878</td>
</tr>
<tr>
<td>Backbone.js</td>
<td>High</td>
<td>1 day ago</td>
<td>documentcloud.github.com</td>
<td>MIT</td>
<td>$331,470</td>
</tr>
</tbody>
</table>

### All Time Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>AngularJS</th>
<th>Ember.js</th>
<th>Backbone.js</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributors</td>
<td>758</td>
<td>394</td>
<td>243</td>
</tr>
<tr>
<td>View as graph</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commits</td>
<td>4,459</td>
<td>6,143</td>
<td>2,455</td>
</tr>
<tr>
<td>View as graph</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Commit</td>
<td>about 4 years ago</td>
<td>almost 3 years ago</td>
<td>over 3 years ago</td>
</tr>
<tr>
<td>Most Recent Commit</td>
<td>2 days ago</td>
<td>about 24 hours ago</td>
<td>4 days ago</td>
</tr>
</tbody>
</table>

### 12 Month Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>AngularJS</th>
<th>Ember.js</th>
<th>Backbone.js</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributors</td>
<td>603</td>
<td>234</td>
<td>58</td>
</tr>
<tr>
<td>View as graph</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commits</td>
<td>100</td>
<td>166</td>
<td>125</td>
</tr>
<tr>
<td>View as graph</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Commit</td>
<td>about 6 months ago</td>
<td>about 6 months ago</td>
<td>about 6 months ago</td>
</tr>
<tr>
<td>Most Recent Commit</td>
<td>1 month ago</td>
<td>1 month ago</td>
<td>1 month ago</td>
</tr>
</tbody>
</table>
From this data

- **AngularJS** and **Ember** appear to be the fastest growing frameworks
- Lesser talked about full-stack **Meteor** is gaining momentum
- The strong ecosystem surrounding **Backbone** demonstrates both the popularity and commitment to this approach
Evaluate This Session

1. Sign-in: www.eclipsecon.org

2. Select session from schedule

3. Evaluate: +1 0 -1

Dave Gruber
Black Duck
dgruber@blackducksoftware.com
@davegruber5