



Modularization for Browser Code

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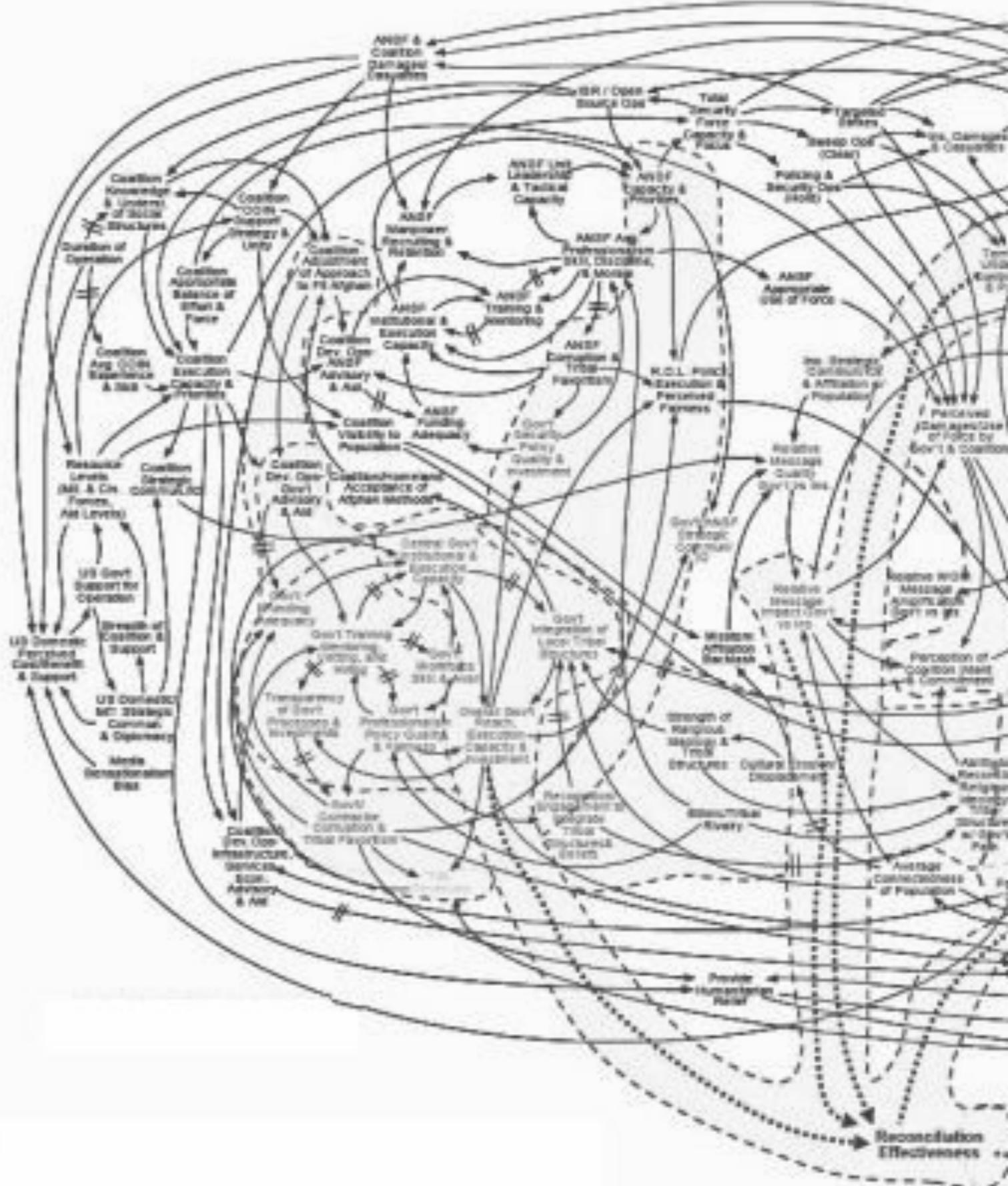
Node.js

- Scalable network applications on the server-side via Evented IO
- On top of libuv, v8. Mostly C.
- Common.js style module loading
- NPM - Node package manager
- Among the many things, building web applications is a pretty popular use case.

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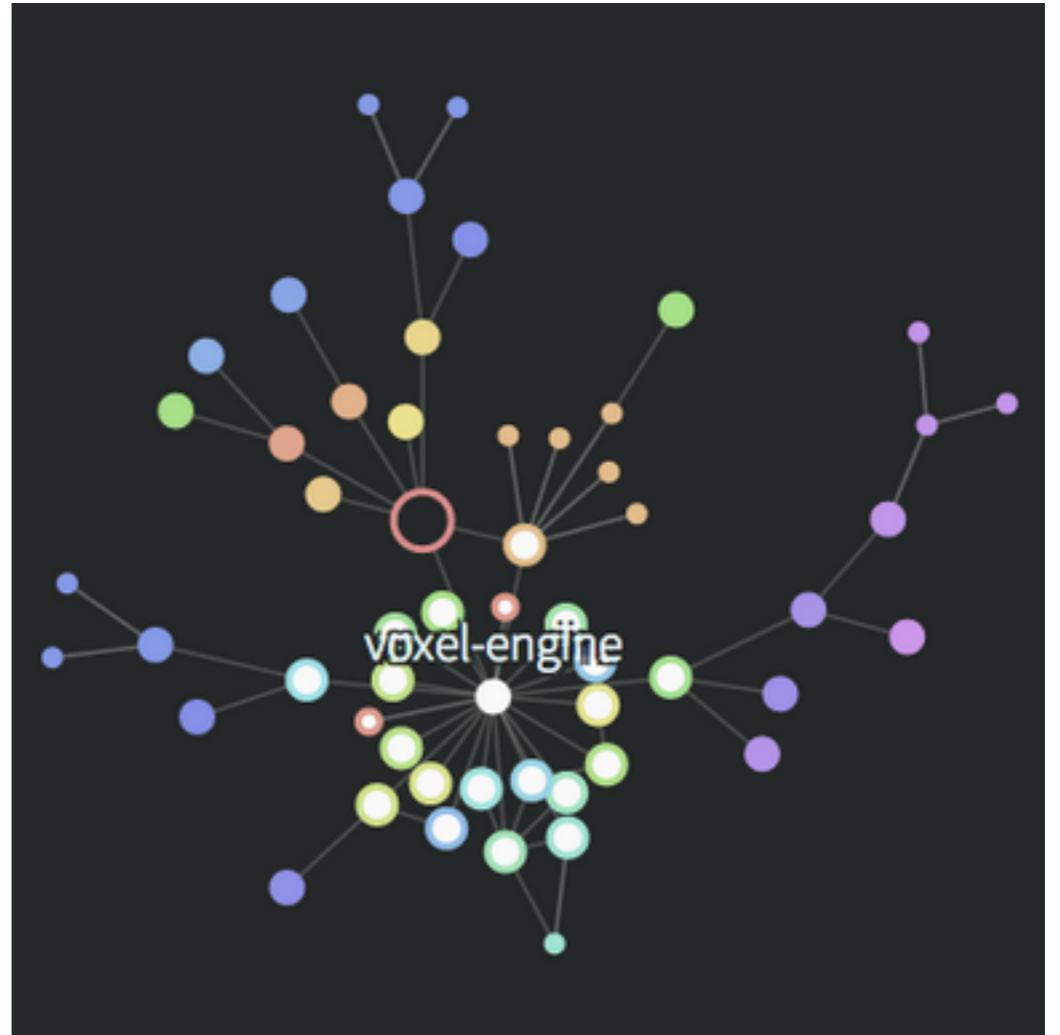
Browser Applications

- Asynchronous dependency loading
- Big 3 - JQuery, Angular, React
- HTML5
- Most seasoned developers will use a tool to organize and bundle javascript for the client



Browserify

- Node loads modules synchronously - the only synchronous part of node.
- Browserify brings require code to the browser by placing them in its own closures for separation.
- Allows NPM modules to be used on the client side.
- Transforms unavailable APIs on the server side.



What? How?

- Recursively builds AST of your code.
- Understands relative locations of your code and dependencies via package.json
- Figures out reachable code.
- Dynamic requires are compiled into the bundle.

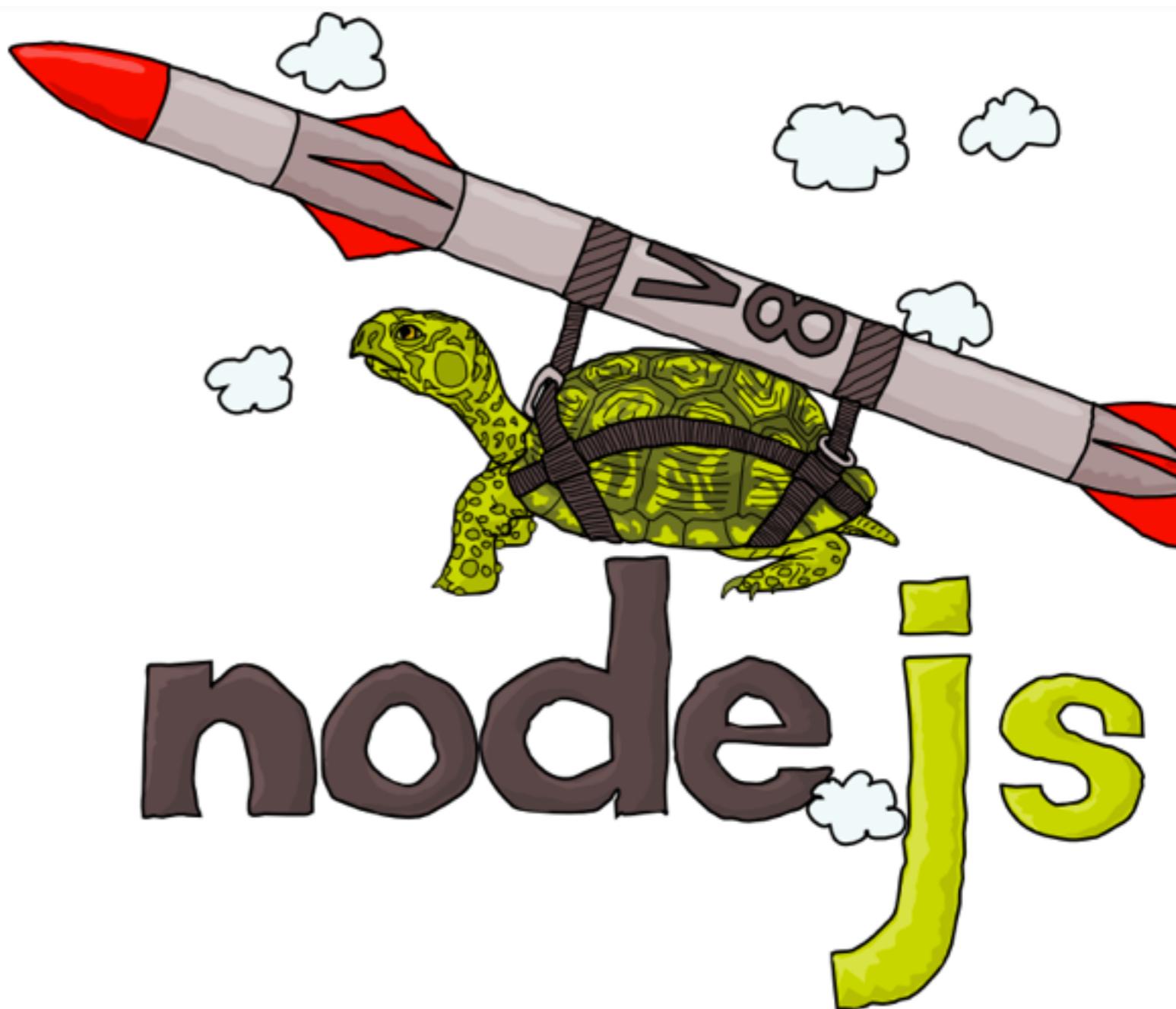
```
var express = require('express');
var app = express();

app.use(express.cookieParser());
app.use(express.session({secret: '1234567890QWERTY'}));
app.get('/awesome', function(req, res) {
  if(req.session.lastPage) {
    res.write('Last page was: ' + req.session.lastPage);
  }
  req.session.lastPage = '/awesome';
});
```



Supported Existing Node Core Modules

- path
- url
- events
- stream
- buffer
- crypto



What to do now?

- Remember that all modules are not found in NPM.
- Check bower and of course my favorite, Github.
- Transforms are actually very easy to write if you read the docs a bit.
- Read about comparisons with other similar tools.





Demos

- Hello World
- Express/JQuery/Backbone
- Transforms:
 - brfs
 - envify
 - hbsfy
- Express/Napa/Angular/brfs workflow



Thanks!

And remember to code everyday.