# Angular Weekly Meeting

go/angular-weekly-notes

## October 26

Agenda:

* When is Beta? The short list is:
  + Break into sub-modules so we have a reasonable packaging story
  + Finish docs
  + Fix bugs
* Beta includes
  + Core
  + Forms
  + Router
  + Other bits will come ASAP, but not required for beta
* Technical training kickoff
  + Building internal Angular 2 training for Google
  + TypeScript for internal is a bit tricky due to experimental status
  + DanAnh joining group to project manage this
  + Meeting tomorrow to kickoff course development
* Agree on packaging [document](https://docs.google.com/document/d/1rbVTKTYLz6p2smQNYI8h4-QN-m2PS6F3iQIDmSzn0Ww/edit#heading=h.6zut9bdi3s71).
  + Will be splitting angular into sub-modules.
  + Working to eliminate boilerplate for component imports...mechanism has several options.
  + Both will happen for beta.
* Better commit messages => Better change log (Igor)
  + Need more descriptive messages
  + Will enforce our Angular 1 style
* g3sync update (Igor/Alex)
  + 15 failures, 150 SHAs behind (mostly docs)
* [Code structure](https://docs.google.com/document/d/1P7iDV4WWknCl1gINuDQb-rYeDSneUDPCr56sBMALOeE/edit?ts=561ebb93) more inline with Dart.
  + Looks good. To be done post-Beta.
* Automating npm publish to do per-commit releases (Igor/Alex)
  + Plan to push nightly or hourly releases to npm
  + Could happen after Beta
  + Nice thing an external contributor could take

## 

## October 12

* In the bomb-run for AngularConnect. Getting in last bits folks need for demos.
  + Naming change bind() to provider()
  + A few Rx changes making clearer APIs
* After alpha-41, no more high-risk changes to MASTER until after AngularConnect
  + No breaking changes
  + No major refactorings
  + Nothing wide-reaching functionality changes
  + Fine to do bug fixes
  + If you're not sure whether it's ok to check something in, please err on the side of caution and ping Igor to double-check
* Most of team is practicing presentations for next week
* Moving to an API deprecation model for breaking changes
* Building infrastructure to push ng2 to npm (and likely code.angularjs.org) on every green SHA

## October 5

* Demo: getting started faster when using TypeScript (Alex Eagle)
  + Currently, there’s extra work to get all the typings files (from DefinitelyTyped) and linked in the right places for all editors and tools to understand them
  + Changing the way we generate and distribute TypeScript typings
  + Users will just have to npm install
  + This will get everything set up without having to additionally configure IDE
  + ‘tsc --watch’ also ‘just works’
  + Also eliminates much work from our release process as we don’t need to generate them or push typings to DefinitelyTyped repo.
  + More details on the extra work that will need to happen at https://github.com/alexeagle/angular2-distro/blob/master/README.md
* Module loader - recap and next steps [Victor]
  + We’ve been experimenting with alternatives to System.js
  + Aiming for zero setup required for users
  + Planning to generate a commonjs bundle so folks can much more easily use Webpack
  + Julie and Pawel working on this
* Docs status
  + In API docs, just need Metadata and Test symbols documented
  + In-docs test infrastructure to be merged later today
  + Igor working with John Papa and Ward Bell on developer guide bits
* Priority this week:
  + Triage issues from alpha-38 this weekend and prioritize.
  + Can we cut an alpha-39 by Wednesday - bugfix only to unblock docs? Plan on alpha-40 for Friday will contain the di binding -> provider rename.
  + Work on sync to google internal in parallel. Rado is sync master. Tobias will pair. Priority for internal users is to get the compiler changes in.
  + Freeze Angular 2 for Angular Connect docs and demos Friday. No breaking changes after that date. [Naomi to let presenters and docs know]
  + After Angular Connect, we will revisit overall release process.

## September 28

* Sync to Google Status
  + Jeff broke the backlog sync of 250+ commits out into 1) rename and 2) other stuff, grouping into smaller chunks.
  + We are down to the last 20 issues to clear. Rado and Jeff to sync after the meeting and determine whether to escalate to internal teams for P0 help getting to the bottom of this.
  + We accrued a backlog by handing off work from week to week. In future, if we can't sync at the end of a week, declare a team P0 until it is resolved. This blocks handoff.
* Release Process (Release Notes, Documentation Updates)
  + Customers (internal and external) are asking for more detail on what has changed between versions.
  + Currently, we provide a changelog, but it's a lot for an end-user to digest. Our commit messages could be more focused on end-users. Many breaking change messages in our changelog are not actionable (not clear to the user what they should to in response to this change). Jules is also open to providing a curated update per release later in the year.
  + Some way of marking things as deprecated might help with the sync. Needs discussion. Rob prototyped a decorator that we can use to mark things as deprecated. Would this be helpful to submit as a PR? Adding decorators has a runtime impact for TypeScript. A comment would be simpler and also show up in documentation.
  + Once we are back in sync (not 250+ commits behind), or if we have the ability to deprecate, it may be reasonable to ask the Google owner of a breaking change to make the fix for users inside Google as a CL.
* Triage of Issues Status: We are 100+ issues behind for triage. Need a more scalable process. Revisit with Misko.
* ~~Animation DSL Status~~ (Misko, Brad and Rob are missing … This will happen next week)
* Docs Progress Update
  + Status of DevDocs/API and where we need help
    - > 50% done, but still lots to do.
    - Igor, Victor, Alex R, Matias, Rob W, working on docs this week.
    - Brian is working on examples with the new tooling from Jay and Ward. Brian to update the API guide with instructions. This is similar to how it works in Angular 1, examples are separate files that can be tested. Not yet possible to provide as an interactive example, but on the road map.
  + New API Overview UI Design (Naomi showed early mocks for a map of Angular 2)
  + Cheatsheet - Naomi would like to finalise this week so we can work on design. Victor and Misko needed to review.
* Grading of Q3 2015 Quarterly Goals, and new goals for Q4 and overall 2016 (draft)
  + Martin and Alex, need to update grades on TypeScript effort.

## September 21

* Removing traceur
  + Originally, we used Traceur to transpile from AtScript (now TypeScript) to JS & Dart
  + After much hard work, it is gone from our codebase
  + Fully using TypeScript for all transpilation
  + We may move from es6shim to core.js for ES6 bits (As do TypeScript & Babel)
* API docs progress
  + Many core team folks focused on API docs last week
  + 8% complete, additional 12% started
  + Fixed many docs infrastructure issues first
    - d.ts file wasn’t inline with the public API docs
    - fixed public/private incorrect bits
    - still many issues around how we present content we create content (creating links, function signatures, etc.)
    - Came out with a list of issues we should process this week
  + Want to have a good set in place for AngularConnect
    - Have completed some of the biggest API docs
    - Will prioritize APIs users hit in the first minutes of development
    - Several of the first concept guides will hit then as well
* Compile as build step
  + Goal is to dramatically improve startup time and reduce Angular 2 size
  + Have created offline compiler pipeline tool
  + Goal is to land this week in core
  + Need to create tool that integrates with Angular 2 toolkit/CLI

## September 14

* API Docs Authoring Sprint
  + Brad has an [API Author’s Doc](https://docs.google.com/document/d/13kQ49My6ThynHOrT3s1cWII5RhNHHGSbOXffbQmQlc8/edit#) which describes how to write API docs
  + Rob Wormald to share his plunker setup with TypeScript loader and SystemJS
  + Examples should be copy-pastable (including imports)
  + Examples should be in CodePen; copy links into content; later we will single-click link to the CodePen example
  + Version of Angular used in examples should be documented
  + Team members will go through [spreadsheet](https://docs.google.com/spreadsheets/d/1mM7etxZNfb_ahfIUSPuT9Z6JaMH8KQhhy5jjjmG7d-c/edit#gid=2120660710) and self-assign pieces of API that make sense to them.
  + Would be nice to throw TypeScript loader on code.angularjs.org (done)
  + How will we test changes in a real UI as we go?
    - Checkout angular.io, and symlink or copy built files from angular/dist
    - Brian will make this easy and amazing
    - Brian will temporarily document the process without the “ideal” solution
  + Will create a special branch to push docs to
    - NO CODE CHANGES ALLOWED!

## August 31

* Transitioning from builtwith.angularjs.org to madewithangular.com
  + Handing off curation and ownership of the Angular showpiece site to community-run madewith.angular.com. It's more current, and has good momentum.
  + We'll deprecate the old site and direct folks to it. All the content still lives in the github repository.
  + Blog post is coming. Brad will write it and introduce Jules to the folks involved.
* The team reviewed the angular 2 developer survey results.
  + Some enterprise folks had difficulty accessing the survey from behind firewalls.
  + Blog post will be out next week with the results.
* Continuing vision discussion. Brad presented.
  + The importance of focus on "the first 20 min" for a new developer
  + Set up a team meeting for next week to think through: what are the clear tasks we want to prioritize to achieve user happiness by beta? [naomi]
  + Beyond that, what are the critical overall visionary goals for angular?
  + How do we measure success against our stated goals?
* Update on ts2dart
  + We discussed:
    - Developer productivity
    - Contributor experience
    - Dart output quality
  + Need conditional compilation (proposal coming) to get the code looking idiomatic for both language
  + Some patterns that won’t compile cleanly can be caught in tslint
  + Need to add this to our quarterly goals
  + Need to document things we shouldn’t do in TS (top-level execution blocks, const semantics, etc.)
  + Need feedback from external contributors on what they need to be successful
    - Might be the right solution to let folks contribute in either TypeScript or Dart and have core team members do the porting
* Coordinating with Angular 1 changes
  + Keeping Angular Material in sync with AngularJS causing non-trivial friction
  + Will pin Material to AngularJS previous version (n-1)
  + Going to add tests on AngularJS to catch more of the regressions
* Core Update [misko]
  + Large raft of (minor) breaking changes we’ve made last week to rename things.
  + **Naming Conventions:** TypeScript has set of naming conventions we’ll follow for the public API
  + **Breaking changes:** Updated all API doc source to match these conventions. This was the major breaking change. Will be pushed to the API docs on angular.io soon.
    - Want to get to “no more breaking changes in core” very soon
    - This does not include http, router, etc.
    - This is criteria for beta
    - We still have Observable/Rx changes that we know are coming
  + **Sugar:** Making many updates for more ergonomic/less boilerplate-y APIs to ensure better developer experience
  + **Upgrade:** Can now bootstrap Angular 2 inside Angular 1. Next step is to do the other way around. Will then work on transclusion and injection.
  + **Presubmit:** We now have presubmit details on our [dashboard](http://mhevery.github.io/github_issues/) to make sure we stay on top of it
* Docs update
  + Working on an Angular 2 Cheat Sheet - anything missing? Please comment.
  + More sections specced out than we have authors for. Need help in the next 2 weeks. Specifically, these sections are outlined but still need owners:
    - Reusable components,
    - Component communication,
    - Navigation architecture (Router),
    - Server communication,
    - Debugging,
    - Bootstrapping,
    - Attribute directives.
  + Ping [Naomi](https://twitter.com/naomitraveller) if you can help.
* App Experience update
  + Introduced use cases for Angular 2 last week
  + Will break down most important ones, do scoring
  + **Testing:** Have been working with Ward Bell on our testing story...many issues we’ve worked through. Have filed many issues related to this so we can make this better
  + **Animations:** Rob + Matias doing Animations for Angular 2. First version lands this week.
  + **Router:** Brian working on managing multiple history stacks. Working with Ionic folks on this.
  + **Bundling:** Jeff aligning publishing with NPM and breaking Angular 2 into smaller sets. Have some remaining bootstrap and Dart issues to work through.
* Tooling for Google
  + Can now run Blaze build with TypeScript library
  + Goal is to have Closure compiler be able to consume output
* Shadow dom changes
  + Shadow DOM spec has changed to support the **slot** proposal.
    - Blink (Chrome) will support both old and new syntax
  + This change is easier to implement for browser vendors.
  + Proposing that we support both ngContent and add ngSlot to support Shadow DOM for folks who want it.
* Proposal for [custom event manager plugins](https://github.com/angular/angular/issues/3800). Needs discussion after the meeting so we can decide what the best approach is.

## August 24

* Angular 2 Roadmap and Vision
  + Reviewed for team as we head for Angular 2 beta
  + Values: developer productivity and community
  + Strategies:
    - Angular1: low boilerplate, structure, testability
    - Angular2: fast by default, simpler, remove architectural limits, mobile as first-class
  + Will cover in detail at AngularConnect conference in October (London)
* A plan for ts2dart tooling
  + Dart is evolving, and ts2dart should evolve with it
  + We should be easing the burden of contributors who aren’t familiar with the dart build process
  + Dart output should be idiomatic
* Revisit subteam alignments
  + New teams were: core, application, material, tooling
  + Going fine, let’s keep trying it out
* ts minify demo
  + focusing on property renaming to improve minification over uglify
  + first target is the ts2dart tool of about 2K LOC
  + not currently renaming external symbols or class names
  + Results of running both tsMinify and uglify against ts2Dart sample result in 56K vs original 72K (also uglified) for a 22% space savings!
  + Final code will be gzipped as well
  + Next target will be running it on Angular 2
* e2e use case coverage
  + Maybe pick time near holidays to focus on non-feature work
  + Other topics could be tooling, process, docs, etc.
* new [angular 2 compiler pipeline](https://docs.google.com/document/d/1iVcmAaONB2ztA5GElL9pOkqcU4Gi5LNJDA0Yyp19AQA/edit#) that will be implemented soon
  + Template compilation is our next target to make Angular faster
  + In prototype, compilation got 8x faster and bootstrap (compilation + view creation) got 3x faster
  + This prototype turns compile to a build-step
  + Means production version of Angular could not ship the compiler code and become much smaller
  + Offline compiler will also find errors and report them to command line or IDEs
* productivity issues
* [User journeys](https://docs.google.com/document/d/1bEqrnJwvsqChCu-76LOidApIOn2ow4gWm7dB6saeFHs/edit#heading=h.mwoi0pftyiij)
  + Igor and others on the team have organized many “user journeys” describing how we expect users to interact with Angular 2.
  + Team members are to review and add/edit journeys
  + Sub-teams will use journeys as a means of communicating what’s being worked on weekly/quarterly

## August 17

* AngularConnect
  + Core team speakers and talks have been decided.
* Plans for browser support on Angular 2
  + Proposing to add full suite of browsers to CI
  + List of what we’d support:
    - Firefox
    - Safari (desktop + mobile)
    - IE11, 10, 9
    - Edge
    - Chrome (desktop + mobile)
    - Android (try 4.1.x+, fall back to Chrome if impossible)
* [Jeff] Review feedback and experiences from Utah hack night
  + Aaron Frost sponsored an Angular 2 hack day in Utah last week
  + Focus was on uncovering usability improvements needed for Angular 2 Beta
  + Jeff and Misko joined remotely to help
  + Themes of issues:
    - Knowing how to use decorators properly
    - Template syntax confusion (binding properties, bubbling, etc.)
    - Quality of error messages
  + John Papa likely to do a similar hack night
* Another hack day for ourselves to build Angular 2 apps
  + Want to build deeper apps using many components working together
  + Focus on the testing story completeness and ease-of-use
  + Build for mobile
  + Happening Sept. 10-11
* Subteams
  + Our team is big, we should have some more focused sub-teams.
  + Stand-ups are a lot of people, a lot of discussion isn’t relevant to everyone
  + Our full team meeting should be focused on cross-cutting design reviews
  + Possible teams
    - Angular 1
    - Internal google productivity
    - Core (DI, compile, render, change detection, zones)
    - Application (router, animations, i18n, persistence)
    - Tools (various Dart tools, ts2dart, CLI, toolkit, etc.)
    - Docs
    - Material
  + Next step: teams nominate their representative / rotation
  + Stand-ups still happen at 11, but in sub-teams
  + Brad to publish first list of who is in which team
* Next set of design reviews
  + Pipes
  + Persistence plans
  + CLI
  + Docs
  + On push detectors
  + Compiler overview + offline compile plans
* Yegor:
  + ng2 google3 report: where we are today
  + Main requests:
    - Features needed soon: animations, i18n
    - New features: User action timing tracking
    - Wants more focus on reducing start-up time, particularly for mobile

## August 10

* Process for managing issues for angular/zone.js, and allocating people/time to a few critical pending issues [Brian]
  + Possibly pull the repo into the Angular 2 core process
  + Misko will do the work to make zone.js issues show up in core dashboard
  + Brian will document how this will work for zone.js contributors
  + We'll add the process steps to TRIAGE\_AND\_LABELS.md
* AngularConnect planning for flights, talks, etc.
  + Get your flights this week!
  + May spend a few days with Amadaeus in France the following week
    - Need to create topic list to get to who we’ll need
  + Brad will send proposed list of talk updates for your reviewing pleasure this week
* Check-in on strategic milestones from last week
  + Known breaking changes for Angular 2 Beta are now on hotlist (Pipes is the last big bit)
  + Misko still to put sugaring bits into a hotlist
  + Jeff will share the hack night recipe from Aaron Frost
* Check-in on this week's sync to google3
  + Jeremy will run trial submit today
* Docs update [naomi]
  + Have started work on one-page cheat-sheet for Angular 2: PLEASE REVIEW!
  + Brad requests an Angular 1 to Angular 2 cheatsheet as well
* Presentation on plans for Animation
  + [Design doc](https://docs.google.com/document/d/1pN27OQqarsn5WKsF-JOxVneTv3VHu2wN3Ry_sp47QUw)
  + Matias and Rob think they THE have the core idea for ngAnimate next gen
  + Want to solve core complexity and allow animation sequencing
  + Adds a timeline system and improves reusability and much performance improvement
  + CSS animations brings many problems:
    - inheritance collision and cascade
    - no sequencing
    - too verbose
    - can’t test it
    - creates delay while we parse CSS
    - want to seamlessly define some animations as JS as well
  + Solving these requires that we drive via metadata instead of CSS
  + Plan is to drive this from an animations.json file in the development project
    - can support at a decorator or JS object as well
  + CSS no just has to specify end states, not how transitions work
  + Now Angular doesn’t have to do computations resulting in greater performance
  + Other benefits:
    - Great for generation by tooling
    - Likely will work great for NativeScript/React Native as well

## August 3

* Strategic milestone goals post-core [Brad/Igor/Misko/team]
  + Reduce compile time performance
  + Stabilizing core
    - Breaking changes should go onto [hotlist](https://github.com/angular/angular/labels/hotlist%3A%20breaking)
    - We have a goal of releasing breaking changes on lower frequency
    - Want to have several weeks of no breaking changes before beta
    - All breaking changes need group discussion
  + Sugaring - developer ergonomics
    - Misko will start a hotlist for this to burn down
    - Needs input from community on what is hard
    - Documentation authors are an initial source of input (Naomi)
    - Ask GDE partners (buddies)
    - Request general community to file bugs that will end up on [hotlist](https://github.com/angular/angular/labels/hotlist%3A%20sugar) (Brad)
  + Documentation
    - API docs are a mess
      * Will have full core team focus on this after breaking hotlist done - thinking September
    - Process changes needed:
      * Run dgeni as part of our test process on check-in
      * Run tests against examples in docs
    - Currently have a group working on infrastructure to generate docs with tests for ES5, TypeScript, and Dart
  + Performance enhancements
    - Misko just checked in [WTF](http://google.github.io/tracing-framework/) support - would like folks to start using it and give feedback on what is missing - Ionic team will start
    - Start-up time needs most attention
      * Compiler optimization
      * Moving compile to a build step
      * Safari seems particularly slow on startup
      * Making a recommendation on a performant build strategy
      * Reducing size of Angular 2.
        + Low hanging fruit will be replacing Rx 2 with RxNext with few combinators or completely unbundling it
        + Post-beta can look into more processing steps to remove weight
  + Build (Igor and Alex E own)
    - Want to have a one-click experience for developers to install all necessary tools and configure build process through the CLI
    - Currently CLI supports scaffolding and build for Hello, World example
    - CLI has trouble with System.register compilation
    - Next steps will be support for IDE intellisense
    - Need to look into sourcemap support
    - Support for dev vs production
    - Will talk with Ionic tomorrow
    - Need to document the magic incantations that the CLI does for folks who need to do things themselves
    - Need to solidify module system recommendations and remove Traceur
  + Application-level APIs
    - Router
      * will hit soon -- easily available for beta
    - Material
      * working through this schedule
    - Animations
      * may hit after beta
    - Persistence
      * http service will be solid for beta
* Presubmit queue; Build times; adding iOS and Safari to CI
  + New process is that you should not push to master
  + Push a branch named 'presubmit-SOMETHING' where SOMETHING is anything unique. Recommend something like 'GITHUBUSERNAME-SUBMITTOPIC' so the result would be like 'presubmit-bradlygreen-supercoolthing'.
  + Alex will add this to COMMITTERS.md and merge these with TRIAGE and LABELS
  + Alex working with maintainer of <http://buildtimetrend.herokuapp.com/dashboard/angular/angular/index.html> so we can tell that the build has gotten slower/flakier and fix.
* Check-in on reaching out to our GDE buddies
  + Time to reach out to your buddy!
  + Topics:
    - Get input on sugaring needs in Angular 2
    - Tell the upgrade story
* Angular 1 to 2 upgrade
  + Original idea was to make Angular 1 and 2 syntax match
  + Now plan is that we let developers mix and match components to allow incremental upgrade
  + Uses we'll support
    - Angular 2 component can live inside A1 via auto-generated facades and the inverse
    - A2 can transclude A1 and the inverse
    - Need to bridge dependency injection
    - Digest cycle of A1 interleaves change detection of A2
    - Plan to have this done for Beta
* Angular 2 docs infrastructure
  + Top priority this week are to get pieces we need to test examples in dev guide as part of release
  + Creating guidelines for what a finished API doc means
* Web Workers update
  + Jason demonstrated running an Angular app running in a web worker
  + Example did image effects and demonstrated the frame rate remaining at 60fps while doing the image processing
* Call for comments [Issue #3458](https://github.com/angular/angular/issues/3458): modules & packages [Jeff]
* Post-meeting design discussion on ng-material 2 [Jeremy]

## July 27

* Forms - verifying basic data types needs pair on issue [2962](https://github.com/angular/angular/issues/2962) [caitp + vsavkin will pair]
* [Jeff & Misko] the importance of green master branch/post-mortem
  + As of last week, we changed our tests to remove default tests against dart on every PR (although we test before commit to master). We only run these tests when the PR is merged to master. This is a problem when issues
  + Yegor's PR was green but on merge broke master.
  + We may also break the build when two green PRs produce a logical collision.
  + Process Resolution:
    1. For any PR you want to merge, check to see if master is green. **Never push if master is red.**
    2. If master is red, and the owner of the PR can't quickly unblock you (e.g. on a late Friday commit) do a git revert SHAs to undo the prior commit(s). File an issue and follow up with the PR owner to make sure it is not dropped later.
    3. OK to check in late Friday commits since anyone can git revert if stuck.
  + We should set up a submit queue that runs all tests and pushes when green. [Misko]
* Keeping the build time fast makes development easier. We need continuous performance tracking for our build so that when we check in a change, we can tell if it's substantially increasing the build time. Alex E has a PR to add this to our dashboard.
* [Alex & Naomi] Sync into google
  + per-SHA sync is still an unsolved problem. Alex E has been working on some dashboards to make the gap between github and google-internal more visible, and make it easier to track which SHA has broken internal tests.
  + Externally, you can see where the latest internal sync is: [<https://github.com/angular/angular/compare/g3sync...master> ]
* Router status - hoping to land auxiliary routes in alpha-34. some bug fixes.
* Forms status - no major changes this past week. A few bug fixes.
* DI status - one more round of renaming is coming in DI per early adopter feedback. breaking change but easy fixes in alpha-34.
* Change detection - better error messages. working on code size this week.
* Animations status - compatibility issues with angular material due to animations in 1.4 are resolved. some ongoing bug fixes last week.
* Material status
  + more components for angular 2 coming, and some design docs this week.
  + closing out our 0.10.1 release for material. first look at datepicker will be available in master later this week, right after 0.10.1 closes.
  + a few blocking issues in angular 2, will add these to alpha-35 todo list [misko/jeremy/naomi]
* Typescriptification
  + We now generate types with dgeni and get them posted to definitely typed.
  + Some issues with router typings. Alex E filed an issue.
  + CommonJS/SystemJS as a path for removing Traceur still unresolved. Alex and Ian to dig into this later in the week (after sync is handed off to Yegor)
* Angular 1.4/1.5 status
  + release blocked on one commit that’s breaking almost all internal targets. Lucas M is figuring out the best solution to get that unstuck.
  + use of typescript and annotations in angular 1 (with an angular 2 code style) is close.
  + some new e2e test failures, possibly related to Chrome, debugging with Hank.
  + dgeni issues (annotations output) - PR out, will be landed this week.
* Triage of alpha-32

## July 20

* Binding AST Transformations
  + core angular feature needed by router. needs some design input.
  + post-meeting discussion to follow
* Latency issue
  + PR is green and ready to merge that fixes this.
  + Sync on Friday was blocked due to a breaking change, so this needs to wait until sync is unblocked. Should be landing tomorrow or Wednesday.
  + Benchmarks that caught the issue were internal, so not caught by Travis CI.
  + Action: follow up with internal user to make latency check a part of TAP tests. (is this feasible? too slow?) [Martin]
  + Every P0 should have someone to pair with the reporter. If the most expert person on the team is heavily loaded, someone else on the team must own.
* Sync status
  + Rado is syncmaster. Last sync was Thursday. Large breaking change on Friday. Working on fixing internal users, will sync later today/tomorrow.
  + blueprint: Alex will be constraining tests internally so that we can manage them
  + How to better communicate breaking changes to internal users on daily sync? [Alex to look into automation for how we can parse existing commit messages] Risk: many commits are not breaking changes but aren't noted as such in the commit message. Sync master would need to update commit message in that case.
  + Note to the team: please take care when writing commit messages. they're important to the changelog and sync process.
  + alpha-32 release on track to happen by Wednesday.
* Angular 1.4 issues in Angular Material
  + Fixes should be in 1.4 later this week.
  + New tests for angular release checking angular material by EOW.
  + Matias is working on longer-term plan for how we effectively test for animations. Will set up a chat with Tobias, Julie, to talk about how to use Protractor for it.
* Documentation Authoring and Infrastructure
  + Meeting tomorrow afternoon to discuss. Core folks, please join if you have expertise/interest. Ping brian to get an invite.

## July 13

* Introducing Jules Kremer, new team member
* Angular 1 to Angular 2 Upgrade project
  + Kickoff meeting last Thursday
  + Brought together several community contributors
  + Pete created a new project in [angular/ngUpgrade](https://github.com/angular/ngUpgrade) with docs to start discussion
  + Next steps are prototype code and more ideas of areas we must cover
* New Sync Process Update
  + Now syncing per SHA commits from GitHub into Google
  + Standups, Core office hours
  + Rotation on call for release-responsible person
  + Naomi will update the internal-to-Google Angular page with info on this process
* [Dashboard Triage](http://mhevery.github.io/github_issues/)
  + Assign issues in the dashboard that have a milestone but are unassigned
  + Internal issues
    - Currently hard for folks to tell what we're doing
    - Hard to measure our throughput
    - Recommend that we keep doing a milestone push
    - Should contain full changelog so external folks can track our throughput easily
  + Load balancing
    - Our dashboard needs work so we can easily see all issues…
    - Will work on this in upcoming weeks
  + Who is doing sync this week? - Jeff
  + What's blocked (at risk of slipping)?
* Typescriptification?
  + There are a few remnants of Traceur in our codebase
  + Some theories of how we move forward on modules as system.js has issues
  + Common.js and system.js aren't playing nicely with Karma
  + Require.js may have better integration with Karma
  + Other bits left are the bundler and our Map shims
* ngAnimate and Material
  + Angular 1 Material needs fixes in ngAnimate
  + Matias will work with Rob to bring these into Angular 1 this week
  + Rob will work with Matias on ngAnimate for Angular 2 later
* Quick Status
  + Angular 1.x
    - Cleaning up outstanding PRs for 1.4.x
    - This week switching to 1.5
  + Router
    - This morning landed matrix parameters, lifecycle hooks
    - This week focusing on auxiliary routes and example code
  + DI
    - Last week merged our two DI systems into a single one
    - Has a small issue that prevents integration with google, found fix, proceeding
    - Still has some quirks. Want to make API surface smaller before beta.
  + Change Detection
    - Jeff and Victor completed work on Pipes. You can now provision them in a reasonable way.
    - This week want to improve error messages to be more useful to developers. Every exception should have context of which direction/component was implicated and how to solve.
  + Angular Material
    - Date picker near completion. Blocked by accessibility bits we need to solve.
    - Working on bug fixes/improvements for Select and Menu
  + Transformers
  + Test
    - whenStable API is now unblocked, now implemented, needs review
  + HTTP
    - JSONP support nearly ready for review
    - URL params serialization in requests should land tomorrow
    - This week getting rid of event emitter in favor of Observables API
  + Core
    - New content project PR lets any renderer us content projection - and it will be very fast! :)

## July 6

* Process discussion
  + Daily standups and core hours for the team (reduce WFH)
  + New [team calendar](https://www.google.com/calendar/embed?src=j8ckmq7s7lv75itm1vj7kjj8bc%40group.calendar.google.com) for core members' availability
* [Dashboard Triage](http://mhevery.github.io/github_issues/)
  + Why we are doing this
  + Assign issues in the dashboard that have a milestone but are unassigned
  + Load balancing
  + Who is doing sync this week? - Jeff
  + What's blocked (at risk of slipping)?
    - Need update on all issues assigned to @caitp
    - Jeff will take on some pipes stuff in addition to Http/Observables work, TBD with @vsavkin
    - <https://github.com/angular/angular/issues/2638> needs design/discussion TBD right after the meeting.
  + Are there any issues in buganizer that haven't been filed in github yet?
* Quick Status
  + Router - Landed support for deep linking. Lifecycle hooks and routeparams are next. Pete added a d.ts file for router. Matias will use this in an example coming soon.
  + DI - Merged a number of changes last week -- midway through the process of unifying to a single stable DI implementation used by core. Should be done this week.
  + Change Detection - work on Pipes is the next piece of this effort, underway now.
  + Forms - Translated some Angular 1 examples from Ward Bell to Angular 2 ([order\_management](https://github.com/angular/angular/tree/master/modules/examples/src/order_management) and [person\_management](https://github.com/angular/angular/tree/master/modules/examples/src/person_management)) to show the comparison of expressivity.
  + Angular Material - Closing in on final deliverables for 1.0 (datepicker)
  + Transformers (@jakemac) - PRs in review.
  + Removing Traceur dep. Two options. We'll explore CommonJS in the short term. Options:
    - Use SystemJS: Two outstanding TS support issues (Ian to link here)
    - Use CommonJS: Needs investigation.
  + Test (@sjelin) - blocked waiting on WhenStable (https://github.com/angular/angular/issues/2808)
  + Http - Landed Dart support last week, with minor breaking changes (and a couple of regressions). Created prioritized backlog of remaining http work in [issue #2793](https://github.com/angular/angular/issues/2793). Caitlin working on JSONP support for M31, Jeff working on simplifying Observable/Stream output and updating to RxJS Next
  + Angular 1 Upgrade Planning: There is a [design doc](https://docs.google.com/document/d/1xvBZoFuNq9hsgRhPPZOJC-Z48AHEbIBPlOCBTSD8m0Y/edit) and a meeting with community contributors on Thursday.
* Topics that need discussion:
  + Zones is pushed out to M32; at risk since vicb not available to own. Would simplify test story for us.
    - A good way forward would be to investigate server-side solution with node. Needs an owner. Brian has background but is heavily loaded on router. Revisit next week.
  + Angular broke Angular Material before the long weekend and needed revert. Post-mortem? (<https://github.com/angular/angular.js/commit/d193c3a25caa0d2c6dd149941c23163dbd062e4d>)
    - Need to write a post-mortem [Jeff] for internal users.
    - Need to add angular material to the angularjs travis build. [jelbourn and matsko].
    - Jeff says everything was Igor’s fault
  + Method decorators that live on the class [#2638](https://github.com/angular/angular/issues/2638) is core but blocking progress on the router. Needs an owner.
  + ...

## June 29, 2015

* Meet new intern, Jason, working on WebWorker execution of Angular2 applications
* Angular 2 upgrade planning
  + Igor/Misko were working on Angular 1 APIs that let you get close to Angular 2 and vice versa
  + This was too complex
  + New direction allows mixing at the component level between Angular 1 & 2
  + Have completed a spike with TODO app with mixed Angular 1 & 2 components
  + This doesn’t mean we’re going to abandon the Router strategy where views are the boundaries for migration

## June 22, 2015

* [Jeff] Core team meetup topic for July MTV meetup: volunteer?
  + Maybe move the Mountain View meetup to bi-monthly? Next one in August.
  + Victor will present on forms in August
  + Ian will present on Tactical in August
  + Future topic ideas: Architectural topics, cross-component communication, Benchpress
* [Alex/Ian] Present design for Tactical
  + general purpose data access/persistence/mutation meant to make full/partial offline support and synchronization, targeting JS and dart, with minimal backend requirements.
  + Project in early phases, starting work now
* [Ian] Design discussion: systemjs or commonjs? decisions for finishing up ts-ification
  + Some issues with the traceur-removal task, relating to SystemJS output by TypeScript
  + Ian to open issues on TypeScript project
* [Tobias] Update on rendering

## June 15, 2015

* Demo: Angular2 and ReactNative (Scott Little)
  + Showed 'Hello World' written in TypeScript using Angular 2 on iOS native ([code](https://www.google.com/url?q=https%3A%2F%2Fgithub.com%2Fuber5001%2Fangular-react&sa=D&sntz=1&usg=AFQjCNHtrSUsZk7Vh5Xv5LzWwN8Q5wJXpA))
  + Uses an Angular 2 template but renders via native UI on iOS
  + We do not need the DOM diff layer of React - we use a layer deeper where we send commands
  + Next step is to chat with React folks per our earlier conversation this year around collaborating on this
  + Other background:
    - We're investing with the NativeScript team on building native mobile apps via Angular
    - We want to learn what we can from the good folks at React
    - We may end up supporting both routes for native if there is good reason
    - Another (long term) outcome might be more collaboration between ReactNative and NativeScript
* Process for Angular 2:
  + [alpha-27](https://github.com/angular/angular/milestones/alpha-27) closed
  + [alpha-28](https://github.com/angular/angular/milestones/alpha-28) in planning
  + how to use "action" tags in github with milestone tracking
* Issues that seem to be slipping? (about 16, out of ~45 assigned)
  + Pawel: [1293](https://github.com/angular/angular/issues/1293) -- need more design?
  + Jeff: a bunch of http-related issues from 27 (2442, 2417, 2416, 2415) - waiting on a master PR in need of final docs.
  + Rado: 2363 (issue had multiple checkboxes but 4/5 were done. could this have been more granular? how to convey to folks following the issue?)
  + Ian: typescriptification cleanup 2335 (Alex is OOO. Rado can help this week.)
  + Brian/Matias: bunch of router issues still open (2329, 2325, 2323)
  + Pawel: ng-class equivalent (2025) -- needs input
  + No current status on <https://github.com/angular/angular/issues/1814> Active?
  + Julie: 1706 (infinite scroll)
  + David: 1381 (ES5 API improvements)
* Update on Router
  + Working on bug fixes based on feedback from use in GreenTea (internal Google app)
  + Will work on deep links, matrix parameters, and difficult sibling routes next
  + Have a method for generating URLs, but need a better method in the near future
  + Will re-start on docs after we nail down rework of the features in mid-July.
* Update on Animations
  + Working on [linking animations to component states](https://docs.google.com/document/d/1ZOL16u-ABjp4NNjtXVgLj0p9_hHRQIB4leloI0X3JMI/edit#heading=h.5b5yrhnlyryx)
  + Plan is for Router to hook into them as well
  + The idea is that animations trigger when components change states
  + See linked doc, but summary is simpler than in Angular 1 with much more ability to do complex animations tied to your app states
* Update on Angular Material (Angular 1)
  + Just launched [0.10.0](https://github.com/angular/material/blob/master/CHANGELOG.md#0100-2015-06-15) ([docs](https://material.angularjs.org/0.10.0/#/))
    - Menu
    - Fab toolbar
    - Fab speed-dial
    - Perf improvements
    - Bug fixes
  + Next release will be 0.11.0
    - Date Picker
    - More Menu bits
    - Infinite scroll core
    - More perf improvements
* Angular U
  + Pete, Misko, Igor, and Brad will give talks next week
* Mountain View Meetup is tomorrow
  + Lightning talk on Material Design 0.10.0
  + Maybe one on http for Angular 2

## June 8, 2015

* New process for milestones, setting meaningful dates for M10 and M11. A tour of the new dashboard.
  + Goals include:
    - Have 2 milestones and backlog for all issues.
    - If issues are not actionable, we'll just close it so we stay on top of the open issues
    - Other process details are [here](https://github.com/angular/angular/blob/master/TRIAGE_AND_LABELS.md).
  + Problem: What to do when a milestone can't be closed because of a late-found internal issue on sync-to-Google
    - We will rename the milestones "M10" "M11" to match alpha release numbers. At start-of-week, we'll have three open milestones: the "closing" milestone that is frozen to check against internal sync, the "current" milestone where most of the work is happening, and the "next" milestone that has tasks > 1 week.
    - The new milestone begins at 8am Monday PT.
    - Need to change our alpha release process to run sync tests before an npm push. Also need a tagging process to clarify when the release candidate SHA is in verification for syn. [Rado to own figuring this out.]
  + Misko should move the dashboard to angular/angular
  + WARNING: if you use not-authenticated, you can lock yourself out of github. Click the link and assign an API token. (We'll fix this.)
* Update on removing traceur dependence
  + Ian working on some giant removal step
  + Martin will pair to resolve open issues
  + Looking like will complete in Milestone 11
  + Some open issues include finding a Map replacement and detecting dev mode
  + <https://github.com/angular/angular/issues/1745> is high priority, should try to resolve this one sooner (M10 if possible)
  + Need to review the backlog issues to get a hotlist of all TS/traceur related issues
* Render Services
  + Right now, there's no good way to wrap direct-DOM widgets (jQuery, etc.)
  + We're looking at doing this via what we call Render Services -- singletons injected via DI that do rendering on behalf of your Directive
  + Details at <https://github.com/angular/angular/issues/2409>
* Angular Material
  + Just launched 0.9.8 today
  + Doing 0.10 candidate later today which adds the Menu component
  + Switching site to Angular 1.4 and will recommend folks upgrade
  + Angular 2 work WAS blocked on custom renderers, but can now continue
* Router
  + Last week reviewed features will all known scenarios
  + Simplified by removing some unnecessary APIs
  + Added scenarios for overlays/dialog boxes which can now be modeled in routes
  + Working on lazy loading components
  + Progress captured in <https://github.com/angular/angular/issues/2329>
  + This week working on e2e test coverage, lazy loading, docs, etc.

## June 1, 2015

* Angular 1.4 shipped!
* Introductions for intern team members
  + Scott Little working on an Angular 2 renderer for React Native
  + Ian Riley working on a data abstraction layer for Angular 2
  + 2 more interns coming later this summer
* Angular 2 release this week. Items in consideration are in [Milestone 9](https://github.com/angular/angular/milestones/M9:%20TypeScript%20and%20Build%20Stability)
  + Only 9 issues left to complete 100% migration to TypeScript
    - Follow ons include better types for Dart, eliminating Dart facades in TypeScript, emitting d.ts file
  + There’s plenty to release without these landing...going for it
  + Rado will do the release
* Milestone planning
  + Moving to model where every issue has a component, type, priority, and effort.
  + Misko will write up as our new process for triaging issues
  + Misko wrote [an Angular 2 app](http://mhevery.github.io/github_issues/) to aid with triage -- shows items that do not have the triaged properties
  + Once categorized, we’ll use the tool as input to milestone planning
* Decorators meeting recap
  + Met with Yehuda/Tom at Ember offices Portland 2 weeks ago around Angular-specific items
  + Discussion was very easy. We have full support for our metadata use cases in the work stream.
  + We were pushing for function expression support. Given this, symmetry would want function declaration support. Found solution for this by hoisting and executing at top.
  + All this was presented in TC39 last week. Generally went well. No change in status -- just an update.
  + For circular dependencies, we’ll help on this with tooling (TypeScript can catch it) and JS VMs. This will be noted in the spec for implementers to handle.
* Demo of CLI tool (Igor)
  + We have a tool in the works for generating Angular 2 applications
  + Handles build system, web server (w/ live update), NPM deps, template checking, HTML/Expression validation, etc.
  + Demonstrated:
    - Generating project skeleton
    - Adding a component and seeing live build/reload
  + Next steps:
    - Testing w/ Karma integration
    - Better build errors inline in web pages
    - Best practices for project structure
* Built-with Angular [Pete]
  + Going to decommission
  + Will announce this if there are community folks who want to take it over

## May 18th, 2015

* Focus and priorities this week and next (Igor, Naomi)
  + We are partway in our typescriptification process. Having a mix of TS and non-TS code is making the build fragile and hard to update.
  + Need to prioritize finishing the process of migrating to typescript ASAP.
  + Tobias will focus on completing the core/compiler and render conversion to TS. Julie will take over some of the testbed work from Tobias to help keep that unblocked.
  + Brian and Matias will work with Igor on plug-ins for build improvements. File build issues under the "Build" milestone for angular 2 so we can find them.
  + Once typescriptification and build stability are in, router, decorators, custom render, and finalising the public api in the core (app injector, pipes, forms) are next in terms of urgency.
* Core typescriptification checkpoint
  + As soon as core/compiler and render are converted, we'll need more people to help with the remaining migration.
  + Work is generally straightforward.
* Docs generation
  + API doc generation from dgeni via TS parser is in a PR ready to go. Needs signoff from Naomi or Alex W.
  + We could use dgeni to generate d.ts files [Alex E. to file an issue, Pete will work on it]
  + Top-level "pipes" has no exported public API at all. <https://github.com/angular/angular/issues/1967>
  + dgeni now has its own config file that specifies which top level modules are to include in the docs. See <https://github.com/petebacondarwin/angular/blob/ts-doc-gen/docs/public-docs-package/index.js#L8-L16>
  + We would like to break out the doc examples from the dev guide and make them testable (similar to angularjs.org). Needs help -- Julie to look into this as low priority item.
* Testbed update
  + Working on the Test Component Builder which has two parts: 1) a mechanism for testing components outside of an application, 2) accessing elements and Angular's information about them in views. [Julie, with help from Tobias]
* Releasing alpha-24
  + Remaining issues closing today, with exception of <https://github.com/angular/angular/issues/1812> which we think should move to M9. Naomi to follow up with Will and Matan.
  + This introduces namespacing (ng-for, ng-if, etc...) so all docs must be updated
  + Need to update all the docs before we can push the change. (Jeff will help with the dev guide update.)
  + Plan is to release Tuesday/Wednesday if unblocked.
* Review hackathon experience
  + Internal angular 2 hackathon was very useful in finding bugs/gaps in our angular 2 API.
  + First-class TS support in an IDE is really important.

**May 11th, 2015**

* (igor): router
  + Too many rough edges, not ready for v1.4. Work with Brian and Matias to improve it.
    - Improve animation support. (directionality of the state transition)
    - Improved migration story.
* (tobias): timeline and planning
  + set up weekly release cycle.
    - Migrate document to Asana checklist
    - Set up weekly releases cycle on Wednesday. (and rotation)
* (jeff): core team hackathon plans Thu/Fri
  + Infrastructure pre-work?
    - Everyone going to use [ts-quickstart](https://github.com/angular/ts-quickstart) as seed project
    - Rado to follow up with Martin to provide single typescript definition file
    - Jeff adding http library with mock to angular/angular prior to hackathon
    - AI: Jeff to set up a shared doc for feedback.
  + Apps to be built?
    - Jeff & Alex starting on Github App with Github API
    - Misko + ?: SVG Chart
    - Matias + Chirayu: Built with site
    - Rado + ?: Trello, google keep, typo of app.
    - Tobias + ?: code-mirror type thing
    - Igor + ?: Dashboards
* (victor): migrating to typescript
  + Misko: DOM adapter (check with Martin)
  + ???: render layer
  + ???: compiler
  + ???:
  + AI: Yegor to make a fancy spreadsheet
* (martin): npm shrinkwrap
  + Tried using it for a clang-format release, didn’t work at all for me, even with hand-editing dependencies package.json files, always errored out
  + Would be nice to get this into a working state.
* (Yegor): situation with the build system
  + running out of file handlers => will work with Igor
* (misko): AngularConnect

**May 4, 2015**

* Doc Single Sourcing and Release Plans for Angular 2 (Naomi, Alex)
  + As part of dev preview, note that releases now have changelog, API doc, and dev guide dependencies. Please check that all of these are up-to-date before an npm/pub release.
  + We will be removing Misko's initial dev guide .md files from the angular/angular repo once the last of these (templates) is migrated over.
  + We will be moving angular.io dev guide and api doc generation into the angular/angular repository instead of angular/angular.io ([doc plans here](https://docs.google.com/document/d/1XiQF3eI1pj7o1u-dIqnufhQt1rGXCVuaIhaJmPyVBUo/edit#heading=h.nlss3gpkfy8y))
  + Alex Eagle will help with next step work on extracting and transpiling examples from a single TS source. We'll prioritize API doc inline examples first so that we can get to Dart API doc publishing sooner.
  + Tagging changes are coming for angular.io -- Alex Wolfe is doing the update please ping him if you have any guides outstanding.
  + If you are updating dev guide content please ping Naomi, Alex Wolfe, Rado so we can get you up to speed on the new templates. angular.io currently needs a manual push to web hosting, any of us three can do that.
  + We need a plan for how we get the downstream angular 1 version of (for example) the router docs from our single source. Igor will run with this.
* Angular Connect Talks (Pete)
  + Please make sure you have sent Pete your name if you're coming, and your talk proposal. See the doc he sent out directly.
  + Brad, Igor (maybe Naomi) will be available to help review proposed talks.
* Summary of refactorings from last week (Tobias)
  + There are only @Directives and @Components. @Decorators are @Directives, @Viewports are @Directives that ask for ViewContainerRef and ProtoViewRef, and @DynamicComponents are @Components without a @View.
  + NgElement is now part of ElementRef
  + New low level public API with minimal surface: Compiler, ViewManager, ProtoViewRef, ViewRef. E.g. used by DynamicComponentLoader and ViewContainerRef.
* Simplification of render layer and component renderers (Tobias)
  + See [updated overview](https://docs.google.com/document/d/1M9FmT05Q6qpsjgvH1XvCm840yn2eWEg0PMskSQz7k4E/edit#heading=h.vstlgrec0sr) and a new section about [component renderers](https://docs.google.com/document/d/1M9FmT05Q6qpsjgvH1XvCm840yn2eWEg0PMskSQz7k4E/edit#heading=h.vqv7a69lcwsl) in the design doc
  + Usable for things like PopupComponent, BidiComponent, IncrementalScrollingTable or NativeScriptRenderer.
* Static DI for Dart (Yegor) - [doc](https://docs.google.com/document/d/1QXnxxJskVho-LBWWhQnCgIK988Dyd1UQAXvnjW1ZKfE)
* Angular Material 0.9 is complete and available on CDN and bower. Introduces Chips and Typography, improvements to Tabs, and polish.
* Alex Eagle - all hands on deck this week core team updating to the current TS build. Need your help, please coordinate on what you are migrating to avoid duplication.
* Misko - Namespacing -- see <https://github.com/angular/angular/issues/1598>
  + This came out of discussion with Thomas re: Angular Material
  + Seems like a good idea, feedback is generally positive. Looking at making this happen.

**April 27, 2015**

* Dev Preview Release
  + We will issue alpha 21 as "developer preview"
  + Will contain the router (Brian)
  + Decorator support (Rado)
  + What does dev preview mean? API docs up, router, changelogs for each version after.
* Milestones 7 and 8
  + Will close out 7 today. Some remaining issues moving to Milestone 8.
  + Misko, Naomi, Jeremy, Yegor to sync today and bring M8 up to date.
* Router
  + Process for modules that are developed outside of angular/angular (e.g. router, i18n, animations) and how to integrate them with angular 2 and angular 1 build processes needs a plan.
  + Router is currently in its own repository angular/router and in angular/angular. Where should discussion, issues, history be tracked?
  + Short term solution: copy code over to angular/angular and generate docs out-of-band and fix them up. Will do code reviews as part of angular 2 codebase.
  + Long-term solution? Can we support a modular build system for angular 2 that is separate from angular 1 and angular 2? Needs more discussion to figure out the long term solution. Ideally, using the new build process for angular 2. Igor will come up with a plan to discuss.
* ViewPort directives are now redundant. (Misko, Tobias)
  + There will only be directives (former Decorator directives) and component directives (a directive with a shadow view).
  + Hoping to land the renaming change by Thursday. We need the router checked in first.
  + Also: ViewContainer is now ViewContainerRef
* Update on the build [Igor]
  + Dart and JS pipeline are coming via broccoli now. The commonjs path through which we run all our tests in node are using broccoli as well.
  + Work is ongoing, but it's getting close.
  + Broccoli build should be very fast; if it isn't, please raise issues.
  + Dart build is slower than it should be. Yegor is following up with Dart team about a separate issue with dartanalyzer running multiple times.
  + We're working on how to deliver the typings based on doc public exports.
* Angular 1.4
  + Another release candidate out last week, with animations updates.
  + Working through small set of issues to get to full release.
* AngularDart 1.1.2 is coming
  + Some minor updates/fixes for the latest Dart. Cutting a release this week.

**April 20, 2015**

* Internal Angular at Google Summit this week (yes, also a sold-out show!)
* Angular 1.4
  + Doing RC1 tomorrow
  + Have all features in place
  + There’s one small breaking change that may go into 1.5
  + No substantial blockers in place
  + Just want to give folks time to test out the RC before declaring full release
* Started porting first application at Google to Angular 2 (GreenTea, CRM platform)
  + No, this is not ready for folks outside Google to start working with - currently only possible with direct access to Angular team
  + We’ll improve, document, etc. based on feedback we collect from internal teams
* Matias introduces ideas for ngAnimate in Angular 2
  + Read the design doc for full details and to make comments
  + Supports three levels:
    - Simple: CSS Triggers
    - Greater control: JS-animations
    - Full control: Timelines
  + Components will declare states that you animate between
  + Performance: Key feature will be to avoid unnecessary reflows and combine sets of elements that must animate together
  + Current JS animations in Angular 1 don’t let you easily coordinate multiple elements animated in sequence or parallel
  + New proposal makes this nicely composable from lower-level animation blocks
  + Will also upgrade to take advantage of language features in ES6/7, TypeScript, Dart
  + Will cover timeline-based animations in the near future
  + Misko: Looks like the right direction, though probably needs more discussion around the API

**April 13, 2015**

* Follow up on actions from last week’s [meeting with React team](https://docs.google.com/document/d/1QZxArgMwidgCrAbuSikcB2iBxkffH6w0YB0C1qCsuH0/edit#)
* Shared 1.X/2.X Code Strategy
  + Matias/Brian/Chirayu working on ways for Router, ngAnimate, and i18n to share code in Angular 1 and 2
  + Plan to have all code in Angular 2 and create version that works in Angular 1
  + Has issues with supporting this as separate repos as the TypeScript/Dart build as we’d have to replicate all that build infrastructure
  + We will need to solve this in the near term so the Angular build doesn’t get too long
  + Will build in the angular/angular repo and export for Angular 1.5
* Router naming
  + Router will be called ComponentRouter
  + Need to know what to call the directive
    - In Angular 1, this is <ng-view>
    - Needs a name in Angular 2. Calling it…<router-outlet>
    - Siblings will differentiate by different ‘name’ attributes
    - Let us know if there are known issues with this naming scheme!

**April 6, 2015**

* Hosting React team at Google on Wednesday. Proposed discussion:
  + i18n
  + CLI
  + Benchpress
  + Animations
  + Standards: types, annotations
  + Other renderers: canvas, native, etc.
* Review potential conferences
  + Angular-focused
    - Google-internal Angular conference (confirmed April 22 & 23): full team
    - ng-conf Las Vegas (confirmed): Jeff, Matias, David East
    - AngularU (confirmed): Igor, Misko, Brad, Pete
    - AngularConnect (confirmed October 20-21 in London): full team
  + Partner
    - Microsoft Build (proposed: April 29-31 in SF)
    - TelerikNEXT (proposed: May 4 in Boston): Brad
    - Dart (proposed: April 28/29 in SF)
  + General (<http://lanyrd.com/topics/javascript/>)
    - TxJS (confirmed: July 24 in Austin): Brian Ford
    - Devoxx (proposed: November 9-13 in Belgium)
    - Fluent Conference 2016 (proposed: March 8-10 in San Francisco)
    - Google I/O (not going)
* New twitter/g+ on-call process
  + 3 folks will rotate on duty posting and answering questions
  + Goal is to coordinate timing of posts
  + Twitter & G+ accounts will now post official communication instead of individuals
* Angular 1 / 2 examples for bablejs.com
  + Rado will investigate for Angular 2
  + Possibly connect with John Lindquist for Angular 1
* Review partner outreach
* Start an “Angular 2 Q&A”
  + Examples:
    - What code can I reuse from my Angular 1 application?
    - Do I have to use TypeScript or ES6? What’s the downside of just sticking to ES5?
    - If I want to use a new language option, what’s the best way to get started?
    - How does MVC map to the new structure in Angular 2?
    - Why this new template syntax? Do I need to use all those special characters?
    - What will I have to do about all the open source modules I rely on?
  + Brad will start a doc. Alex, Rado will help fill in content.
  + Blog post to follow soon.
* Igor presents on possibly using broccoli in Angular 2 team build
  + Why not Gulp for Angular builds?
    - Gulp uses streams that don’t compose well for complex transformations.
    - Ex: Dart analyzer causes friction. With multiple languages and source maps as well.
  + Why broccoli?
    - Supported by trees that mirror filesystem
    - Lets you have a transactional-style build pipeline
    - Trees later in process can have more files than those previously
    - Can do operations on multiple generated trees
    - Can merge trees (output for ES5 from TypeScript & ES6 sources for example)
    - Incremental builds by default
    - Cacheing is built-in rather than manual
  + Concerns on broccoli
    - Mainstream usage only in ember-cli (and even then only used as a lib, not as a tool itself)
    - Many rough edges - not forgiving for things off common path
    - Some implementation flaws (though fixable)
    - Some design decisions won’t scale inside Google, though it maps better to blaze (bazel) than does gulp
* API Docs
  + Have a [list of API docs status](https://docs.google.com/spreadsheets/d/1vzW_I3FuP8jHE5n2i7sFWQD9VII8vR6o7khg2p_c7ho/edit#gid=0)
  + Team should sign up to write initial version
* Misko on Naming Stuff
  + Many things in Angular 2 could have better names
  + Some concepts don’t have names at all. Need to fix this so we can describe in docs.
  + Example: @Template should be @View which
    - Better matches developer intention
    - Matches use cases with non-DOM renderers like native, canvas, WebGL etc.

**March 30, 2015**

* Angular 1.4
  + Matias finished animation PR so it will hit the 1.4 release!
  + Waiting on PR from Pawel on http parameter serialization which should land today or tomorrow
  + With these, we’ll be at RC0
  + Still need migration guide and look for folks with issues
* Angular 2
  + Core
    - Working on Overlay, positioning service, and 14 other issues to unblock internal development
    - Will have API for focus handling
    - Packaging:
      * Have an ES5 building working now. Currently LARGE (100K). Needs minification help. Currently includes many dependencies like Rx which need attention.
      * Getting this output into our build process
      * Working on an output for ES6 next
    - Testing story
      * VicB Adding micro tasks to Zone.js for test support
      * Tests are now injectable
      * Need to write mocks
      * Julie adding API for e2e testing supporting Protractor
  + New Render Layer presentation (tobias)
    - Now splitting Angular 2 rendering so change detection, DI and Directives are separate from animation, templates and other rendering concerns
    - Goal is to support other, non-Dom renderers like from WebWorkers, mobile native (a la NativeScript), and server-side rendering
    - Details in the [Angular 2 Rendering Architecture](https://docs.google.com/document/d/1M9FmT05Q6qpsjgvH1XvCm840yn2eWEg0PMskSQz7k4E/edit) design doc
  + Angular 2 http prototype (Jeff Cross)
    - [RFC (read-only)](https://groups.google.com/forum/#!topic/angular-data-dev/tN0oGFnSEdQ)
    - [Github repo for comments](https://github.com/jeffbcross/http-design)
    - Will have a PR for Angular 2 in a week or two
  + Microsoft TypeScript Visit Report
    - Covered Module system issues - lobbied for system.register strategy -- our top issue
    - Worked on single-file compilation -- nearly done
    - With decorators and annotations we decided to create a test suite to ensure preserved compatibility
    - Full notes captures in a [meeting doc](https://docs.google.com/document/d/139ImayzFfHwYDzPIfwOHgf4BsAsr4HIC0vaudF98Rog/edit)
  + Observables in Angular 2 core (victor)
    - Added initial support for wrappers
    - in Dart we use Streams
    - JS currently using Rx 2
    - Will move to Rx 3 soon as is available -- it’s aligned with ES7 standards work
* Vacations & Conferences
  + AngularConnect publicly announced for October 20th & 21st in London
  + Next meeting we’ll take a look at which conference we’ll be at in Q3/Q4/Q1

**March 23, 2015**

* Angular 1
  + 2 areas to get in - Animation refactoring and HTTP Url serialization fix
  + Planning on release candidate at end of this week (depending upon Animation)
  + If Animation goes in, may have another beta to give it bake time
  + Not started planning on 1.5 -- will do this once 1.4 is released
* Angular 2 near term
  + Forms
    - Have a non-data-driven version working. All basic inputs work. Validation works.
    - This week, Victor will implement data driven forms. Plan to have a prototype this week. Next week, hopefully usable.
    - Exploring HTML-driven forms (like Angular 1) to support prototyping uses
    - Adding support for Observables (JS ES7 proposal, in coordination with Jafar @ Netflix) and Streams (Dart)
  + Overlays (pop-ups/modal dialogs)
    - Starting design this week
  + Documentation
    - Working on a common style guide and method for generating ES5/6/TypeScript/Dart from the same content source
    - Docs for Annotations API nearly finished
  + Packaging
    - Goal is to help people get started with developer workflow / tool chain supporting ES5, ES6, TypeScript, Dart and various build tools
    - Starting this week. Design doc soon.
  + Switching infrastructure to TypeScript
    - Plan to incrementally move to the new Dart transpiler in TypeScript tool
    - Can currently transpile Angular code base to Dart, but it is not yet correct Dart. Correct Dart coming soon! :)
    - [Plan document](https://docs.google.com/document/d/14RJLhu6uuv7NchFkAb6PKzOOO0L7l3Z507eKWzkEUhQ/edit)
  + Starting Angular Data working group
    - engaging folks who have data integration come together
    - will bring ideas on what we’ll implement to the current world to get input on direction
    - Publicly-visible group, invite-only participation: <https://groups.google.com/forum/#!forum/angular-data-dev>
* Material Design
  + Working on 0.9 polish & finish milestone
  + Current work on chips-ui, may be in demo state by end of the week
  + Working through issues in Angular 2, driving Angular 2 support via this
* Render layer
  + Idea is to split angular into application and views.
  + Intent is that we can run Angular in other rendering scenarios:
    - in webworker
    - in native mobile UIs
    - with server-side rendering
    - etc
  + Will land the new renderer tomorrow, in master with tests by end of week
* Angular.io new content
  + Updated resources page with new info
  + Chat link has pointer to Gitter
  + Other small updates
  + Currently at 3K views per day!

**March 16, 2015**

For discussion later today:

* Which projects will we support during early alpha (i.e. no docs yet)? Candidates:
  + Internal:
    - GreenTea
    - Ads
    - Material Design
  + External
    - Ionic
    - Telerik
* Our focus to get to Angular Core Beta
  + Definition:
    - Developers can start work on Angular 2 without our direct assistance
  + Features that are IN
    - Docs & docs infrastructure
    - Router
    - Lazy loading
    - Transformers
    - Forms
    - TypeScript tool chain and process
    - Animation
    - Overlays
    - Basic Accessibility
    - Testing story
    - Benchpress tool
    - Process that shows benchmarks comparing every release
  + Coming later
    - Full ARIA magic
    - i18n
    - Persistence
    - Production deployment tools & process description
    - CLI
    - ViewStack
    - Data Grid base
    - Material Design
    - WebWorkers

**March 9, 2015**

* Debrief on ng-conf
  + Messages appear to have been well received
    - Migration from Angular 1 to Angular 2 seems to work for most
    - Angular 2 is fast fast fast
    - AtScript, now TypeScript has a bright future
    - Angular 1 will be well supported
* Planning future work
  + Next target for Angular 1.5
    - Planning TBD
    - Will collect candidate PRs and issues
    - Theme is making 1.5 easier to migrate to Angular 2
    - Planning will start after Angular 1.4 release in the next week or two
  + Angular 2 M6
    - Focusing on the needs of our early adopters
    - Enabling Material Design component work
      * ARIA
      * Prefixing attributes
      * Writing to attributes and properties
    - Chatting with IonicFramework folks on their needs
    - Workable version of Forms
* Upcoming events
  + March 17 - 22: Igor, Brian, Chirayu in Tokyo
  + March 25-26: Visit TypeScript team in Redmond
  + April 8: Meeting with React team @ Google
  + ? April 20: Extensible Web Summit (Tobias?)
  + April 24: Web Components Face 2 Face
  + ? April 21: Fluent meetup
  + April 21-23: Google internal Angular conference
  + ? April 29 - May 1: Microsoft Build
  + June 22-25: Angular University in San Francisco
  + Mid-October 2015: ng-London

**February 23**

* Team Member Updates
  + Julie: working on Angular2 testability patch.
  + Caitlin: working on making angular2 function in jsc. Some issues fixed, others need work. Focusing on bringing in upstream Traceur changes to Angular2. Also helping
  + Matias: Animations in 1.4 landing this week. Working on Animations for 2.0. Planning to keep same code for AngularJS 1.5 and 2.0, similar approach to router. Probably a couple of weeks before prototype, end of March to have a foundation to build on during April and May.
  + Misko: getting ready to present at ng-conf, working with Victor on pipes design, collaborating with Matias on animation.
  + Pawel: working on ng-conf Angular 1.x presentation. A few bugs fixed on Angular2.
  + Pete: nothing interesting, lots of meetings
  + Yegor: worked on benchpress for dart, got it working. Working on DOM adapter, researching offline DOM adapters for server-side template compiling.
  + Tobias: worked on benchpress, major bits in, google internal integration, fix perf-ci jenkins job to remove flakes, working on ios-driver support, and then releasing to npm soon. Preparation for ng-conf presentation.
  + Victor: working on pipes design, early implementation ready with support for Rx observables.
  + Alex: working on AtScript format support internally. Working on interop between AtScript and Closure Compiler. Compiler plays well with DefinitelyTyped syntax for Closure Library.
  + Chirayu: Working on gender and plural support for AngularJS 1.4. PR needs a little work, hoping to land this week.
  + Rado: Worked on DOM read/write queue. Built a big Angular2 application for ng-conf, found some bugs and fixed them. Helping bring others onboard with Angular2.
  + Naomi: Working on Angular Material 0.8 release. Website reboot for ng-conf. Internal conference preparations. Worked with Misko on defining Angular2 milestones. Doing some issue and milestone cleanup on Angular2 repo.
  + Rob Messerle: Getting 0.8 build into npm and Github. Finished autocomplete component, other bug fixes.
  + Brian: Worked through zone issues. Some open items on GIthub with zones to improve debugging, planning to publish release tomorrow addressing issues. Has been addressing feedback on Github about new router. Preparing for ng-conf.
  + Jeff: ng-conf presentation prep. Angular 2 Http design fleshed out with Caitlin and Ben Lesh, good foundational design, needs more examples fleshed out. Doing some work on Benchpress and Benchmarks this week. Helping David East as needed for new site.

**February 8**

* Team Member Updates
  + Brian: Working with Lucas & Pete to get API docs together. Focused on ergonomics and polish so we can announce availability of the new Router for 1.x.
  + Julie: Will be in MTV this Thursday. Will work on Angular2 testability API and thoughts on end-to-end testing together. Thinking of new way to hook into WebDriver through a proxy server to make development more streamlined.
  + Lucas: Triaging 1.x issues. Starting work on Angular 1.x new Router and continue until ng-conf.
  + Matias: Refactor of ng-animate -- will fix all known bugs everywhere! :) Have a nearly complete API. Added feature to move elements between pages. Making work with routing. ng-animate will automagically work with routing. Will have demo next week.
  + Misko: Working on some structural changes in A2. Making lazy-loading of templates work for Angular2 with VicB. Doing annotation/decorator syntax with Jonathan from Typescript team.
  + Pete: Chasing small pull requests for Angular 1.4 release to get to final in the next week or so.
  + Shahar: Getting ng-cookies merged...getting other PRs in.
  + Yegor: Pushed Angular2 scrolling benchmark to master. Angular alpha is packaged for Dart. Working on automating the packaging. Now syncing to google. Met with Dart team to integrate our benchmarks with their performance test infrastructure. Should complete in a month or so.
  + Alex: Fixed bugs in AtScript to Dart transpiler. Added unit tests. Working on ideas how we can work closer with the TypeScript team.
  + Victor S.: Did core functionality to forms. Working on basic validations for forms. Looking for the most ergonomic API for developers now.
  + Igor: Spending time on the new Router this week. Later will visit the NPM team to discuss making it better for client-side JavaScript.
  + Rob: Finished Material Design autocomplete module. Looks good for Material Design 0.8 RC1.
  + Chirayu: On i18n working on message extraction code. Figuring out how to have expressions inside message format. Getting this done for AngularJS 1.4.
  + Naomi: Working to land Angular Material 0.8. Planning timelines for Angular2.
  + Rado: View reuse done for Angular2. Much better performance. Working with David on his Angular2 ToDo app for tomorrow night's demonstration.
  + Marc: Fixed issues in directive naming for Angular2.
  + Pawel: Working on equivalent of ng-class= for Angular2. Planning to refocus on AngularJS 1.4 until ng-conf.
  + Jeremy: i18n for datepicker. Started working on Angular2 template variable assignments to implicit values. Will start Angular2 Material Design this week.
  + Tobias:
    - Sent initial version of Ng2 npm package to David East
    - Talked to Dart folks re running our benchmarks. And they can, including nice graphs, ... Yegor knows details.
    - Benchpress: Rewrite almost done, got distracted by publishing Ng2 to npm

**February 3**

Agenda

* Amadeus visiting
  + Three folks from Amadeus working with us on Angular 1 & 2
  + Bringing them up to speed on Angular2 - will identify areas to contribute
  + Involved in i18n, accessibility, and router in particular
* Moving folks to A2
  + We have the ToDo app done, but needs core help as it has much that is rough
  + Misko put together a [list of near-term needs](https://github.com/angular/angular/milestones/M4:%20Basic%20Apps)
  + Tobias free in mid-feb to join
  + Jeff will join Brian on Zone/WebSockets issue
* Material design summit update
  + Brought full team together
  + Worked out many process issues
  + [0.71 now out](https://github.com/angular/material/blob/master/CHANGELOG.md) on CDN
  + Heading towards 0.8 with many more components (select, svg icons, menu, icon buttons, textfields, grid list, list controls) - will have an 0.8 release candidate by next week. [[See what's in 0.8](https://github.com/angular/material/milestones/0.8.0-rc1)]
* Benchmarks status update
  + Table scrolling benchmark now works on Angular2
  + Rewrite should be done in a few days and work for both Dart and JS
  + Next step: pretty graphs!
  + Next step: large table benchmark
* ng-conf logistics checkin
  + Internal presentations should start week of 2/16
  + This week: Build outline
  + Next week: Create slides
  + 2/16: present first run
* CI status
  + Non-news: CI is hard!
  + Working on SocketIO reliability to improve Travis
  + Julie/Sammy can help
  + Mark Trossler (Googler) may take over Karma leadership from Vojta - final details to be sorted out
  + Working on vision doc on where to take Karma next
    - performance
    - usability
    - will share doc soon
* Status updates
  + Misko:
    - cleanup work
    - demos
    - change detection is doing really well
    - talking to dart team about transformers
  + Jeff:
    - working on data access design this week
  + Igor
    - TC39 annotations discussions last week
    - Working with Amadeus, out in training part of this week
  + Chirayu
    - i18n - started work on the new js version of the parser, and running a weekly sync on project status
    - slide prep for ngconf
  + Naomi
    - last week: material design summit
    - this week: milestone planning for angular2 and angular material
  + Alex R
    - Voyeur until April 1
  + Yegor
    - infinite scrolling benchmark is almost done. v2 is 2x faster
  + Alex E
    - working on transpilers => closure can now emit typescript friendly code
    - more polish
  + Rob M
    - angular-material, text autocomplete component, working on 0.8
  + Pawel, Bertrand, Marc
    - visiting golden gate, watching superbowl
    - working with the MTV team the whole week
  + Rado
    - worked with David on TODO app
    - react conf
    - taught internal AngularDart class
    - packaging and releasing v2
    - working on docs
    - working on view reuse
  + Victor S
    - change detection work
      * rewrote it again
      * slow mode (classic mode)
      * JIT mode
      * designed tree-shaking capability for dirty-checking
  + Tobias
    - rewrite of benchpress in progress
    - big refactor of angular/angular to remove need for System.path mappings
  + Tim
    - working on Dart transformers
      * got up to speed
      * as of today, actively working on transformers
  + Brian
    - working on an issue with WebSockets in Zone.js
    - an RFC for allowing lazy registration of providers into injectors for angular 1.x
    - pairing with Pawel and Lucas on their feedback on the router in 1.x
    - later focusing on moving the router into the ng 2 repo, and continuing to polish examples, docs, and remaining ergonomic issues
  + Matias
    - animations
      * refactoring ngAnimate for 1.4, adding timeline capabilities
  + Julie
    - internal Jasmine/Protractor upgrade => time sink
    - this week working on supporting non-chrome browsers in benchpress
    - pass of CI/karma to Sammy
  + Lucas
    - working on v1
    - landed new version of $parse => major perf win
    - looking at new router
    - fixing angular.module issues

Demos

* Jeff on [Lovefield](http://google-opensource.blogspot.com/2014/11/lovefield-powerful-javascript-sql-like_17.html)/Angular integration experimentation
  + Summary: fun! neat! needs work before practical!
* Misko demo Angular2 todo app
  + Same ToDo we love/hate, but now running in Angular2
  + Using Firebase as backend
  + Included Traceur so we can import AtScript and run it on the fly
    - Breakpoints work through sourcemaps!
  + Templates are inline as we don't have template loading yet
  + Has an issue with Zone.js not working with WebSockets. Fix in the works.
  + Done with events. Will look nicer once Forms is done.
  + David East will present it at next week's meetup here in MTV/SFO
* New animations
  + Want to simplify the current implementation
  + Hooking in scope and DOM into animations is hard
  + No way to chain animations or run in parallel - Want to add ability to have animation sequences
  + Matias has a new design doc to solve these problems
  + To be delivered in AngularJS 1.4

**January 26**

* Welcome to Alex R., transferring from GreenTea team, joining Angular to work on RPC with Jeff
* Meeting updates:
  + Material Design Summit
    - All folks on the MD project are here this week
    - Goal is to launch 0.71 and get 0.8 under-way
    - Had conversations with Ads and Cloud teams about components missing from the spec to address complex desktop needs
  + JavaScript Futures
    - Yesterday we met with a bunch of folks (Angular, V8, Closure Compiler, TypeScript, Chakra, and Flow teams) to talk about common needs around Types in JavaScript. Also had a good discussion about Annotations and Decorators. Lots in common.
    - Igor and Misko are headed to TC39 tomorrow to present.
* Time horizon for support of 1.x
  + Let's review:
    - < 1.2 - deprecated
    - 1.2 - security fixes only
    - 1.3 - current
    - 1.4 - next
  + What kind of a public timeline could we put together? We'd like folks to be able to comment on our plan.
  + In the past, we found that interest decreases rapidly after major version releases
  + Angular2 will likely be a steeper migration and needs different thinking
  + We have an Angular 1.5 on the radar and are gathering ideas.
  + The future will depend on how Angular2 is doing and how easy we can make migration. We'll need to sample to see.
  + TODO: Pete/Igor create strawman of how we'll approach support to announce at ng-conf
* Jeff will start $http equivalent for Angular2 next week. Will sync with vicb on this.
* Tobias in rewriting Benchpress to AtScript. Will need to improve webdriver/ieDriver to expose performance logs.
* Team proposals for ng-conf

**January 12**

Agenda:

* Welcome Alex Eagle to the Angular team!
  + Initially working on bridging Closure compiler and TypeScript
* Tobias - Demo
  + Presented new benchmarking
  + Perf tests stabilize faster
  + Now have consistent comparable results
  + Tracking historic results in Google BigQuery -- requires access, but we’re happy to give access to anyone who wants it. Not interesting for most as we’ll summarize results on every release.
  + Next step: run benchmarks on mobile devices -- putting the parts together now.
* Launch process [doc](https://docs.google.com/document/d/16UhnPdpYG4tvcFHKYCI9hMSCWwD7F0x3wzeCe4YHLKI/edit?usp=sharing) (Caitlin)
  + Developing a process to evaluate value and costs of features & bug fixes
  + Be better about documenting thought process behind features
  + Give better path for developers to give feedback on our plans
* Who are we? [doc](https://docs.google.com/document/d/14M5Xwg3_To5f64JAXahvGmOx1eUkNkvW5-fgte1is5o/edit?usp=sharing) (Caitlin)
* Misko on change detection
  + We've made Angular2 two to three times faster than AngularJS 1.x for our Tree Benchmark
  + However, we think it should be faster.
  + After some analysis, we've made almost everything inline-able, but found that VMs can't optimize our call to the getters because they're megamorphic.
  + In Angular2, watches have to be known at compilation phase and we can pre-generate all of these.
  + We can reduce the number of megamorphic calls from the # of elements to the # of views and should be much faster.
  + It's possible that we could drop the compiler and parser from production.
  + It's possible that we can do the same trick for element injectors to make DI faster.
  + Next step is to measure. Victor is prototyping this to check rough performance numbers.

**January 5**

Agenda:

* Tobias presenting [benchmark results](https://github.com/angular/angular/pull/330#issuecomment-68027154) and his proposal for automated frontend perf testing via webdriver
  + [Link [to doc from tobias](https://docs.google.com/document/d/1gSnnhdEV6ScjEGDkZuz2yvqRUVnE6N7MI0JPxlTRmnE/edit#heading=h.oqb7l3ej6vmo)]
  + Using WebDriver with Chrome, we can access the full timeline via Chrome's Remote Debugging Protocol (exposed via ChromeDriver, [more info here](https://sites.google.com/a/chromium.org/chromedriver/logging/performance-log)). We can now fully automate our performance tests in Chrome.
  + Not in master yet (will be later this week) but once checked in we'll be able to verify benchmarks on every Travis run.
  + Works in Chrome and (sort-of) on iOS today, via Appium. We'd like to explore ways of getting this to work on other browsers too. [**Julie** will own this.]
  + We'd like to output log files from Travis [**Julie** will own this too.]
  + We'll make this the "new" benchpress (no new name needed).
* New team member: Alex Eagle! Welcome.
* Hack Days:
  + Proposal to once a month have a few days set aside for unstructured Angular work (e.g. we did this last week).
  + Is this a good idea?
  + We tried this once before. It's a good idea, but needs to be scheduled and planned for. It's better to have someone you pair with so there's a specific plan for what you want to do. At the end, everyone should present.
  + New rules!
    - Feb 16th, if you want to take 2 days as "hack days" you must 1) present your plan and 2) have someone interested enough to pair with you
    - We'll have our hack days that thursday and friday, with presentations on the Friday.
    - No Hack Day for Misko -- he will be judging.
* Paperclub:
  + Last week, a few people met and read some papers related to Angular, then got together to discuss. [http://shaffner.us/cs/papers/tarpit.pdf]
  + Ongoing, let Vojta know if you want to join and didn't see last week's email.
* GDEs
  + We have new GDEs! Dan Wahlin, John Papa, Wilson Mendes. Igor would like members of the team to sign up as mentors for them.
* New York trip report from Igor. In December, a group of Angular folks went out to NYC to meet with internal and external users and speak at the meetup.
* ng-conf
  + By EOW, Igor would like to have talks nailed down [link to spreadsheet] and PRs sent to their repository for the talks we're giving. Look for an email from Igor on that.
  + Igor to follow up with google folks who expressed interest in attending.
  + We need to sync up on travel plans.
* AngularJS Update
  + Some work on refactoring ngOptions, mostly on vacation.
  + Had a kickoff today for the 1.4 cycle and the first of the beta releases should come out on Monday.
  + Two new community members involved in weekly planning: Shahar Talmar, Jason Bedard
* AngularDart Update
  + End of last year we did a big triage and fixed some issues, merged and pushed them.
  + We're planning to release 1.1 this week. [Victor/Chirayu, starting Tues Jan 6]
* Angular2 Update
  + Tobias is working on finishing benchpress2. Large table benchmark from angular 1 is next.
  + Naomi will check in with Yegor about porting the scroll table benchmark from angulardart, using benchpress2.
  + Jeff will help port large table from angular1 to angular2.
  + Need to add benchmarks for polymer to benchpress. Igor needs to follow up on this. [Igor will own polymer in benchpress]
  + Misko to do Angular2 triage this week.
  + Zones is in and working. You can see this in the example app. Misko to review.
  + Design for Forms is still under discussion. Feels like we are ready to start implementation work, but nothing gated on this this week.
  + Victor working on emulating shadow DOM this week.
  + Jeff is doing some experimenting around offline support.
  + Naomi and Misko to hash out a plan for docs work starting.
  + Next big pieces of infrastructure for angular 2: Forms and Directives, Animations, Docs, and building a reference app.
* Angular Material
  + We're closing in on a 0.7 release candidate.
  + Internal users are still on 0.6.1 since we held off on a sync over the holidays. We'll be running a sync mid-week.
  + No breaking changes planned, but some style changes may have unanticipated consequences for users. Still in pre-release.
* Protractor:
  + Investigating using Jasmine2 with Protractor as a framework option for people who want to use it.
  + Julie to follow up with Marcy on the accessibility automation piece and cc Igor.
* Q1 Planning: Misko, Naomi, Igor working on the plan for what we'll attack. More on this shortly.

**December 22 -- NO MEETING DEC 22 or 29th -- Happy Holidays :)**

**December 15**

Agenda:

* Angular2 update (Victor)
  + ng-repeat is done. next step is building a Large Table benchmark.
  + preliminary zone support is in. Comments welcome. [vsavkin with bford]
  + Victor is looking at speed improvements in change detection this week and exploring ways of improving debugging.
  + Victor will share the design doc for Forms in Angular 2 for comparison with 1.4.
  + Jeff is working on a design doc for Offline in Angular 2.
* Angular 1.x update (Pete)
  + Met last week to review and agree on main goals for 1.4. [Summarized in blog post](http://angularjs.blogspot.com/2014/12/planning-angular-14.html).
  + Meeting tomorrow with Martin Staffa to go over improvements for Forms and potential breaking changes in 1.4. Victor will join.
* AngularDart update (Rado)
  + We did a round of triage last week and have decided on issues/PRs that will be in the next AngularDart release in the coming weeks.
  + AngularDart freeze is done. We are merging PRs this week.
  + Two big areas of pain for users are CSS Shims and Transformers. We'll be making both of these much better in Angular 2; in the interim we've proposed some workarounds for users' specific needs and updated docs ([shimming](https://github.com/angular/angular.dart/wiki/CSS-Shim) and [transformers](https://github.com/angular/angular.dart/wiki/The-Angular-Transformer)).
  + Docs on publang are broken. Seems to be due to infrastructure differences between AngularDart docs and Dart docs. [Chirayu]
  + Rado is syncmaster currently. Starting tuesday, Victor Savkin will take over Sync.
* Angular Material update (Rob, Naomi)
  + Last week we released 0.6.1 and posted to the CDN
  + We're aiming to release 0.7 RC1 on Dec 16 with the main Theme API changes and refactored tabs. This will be it for breaking changes in 2014 from Angular Material.
* I18N update (Chirayu)
  + Tasks are now broken out in [the doc](https://docs.google.com/document/d/1mwyOFsAD-bPoXTk3Hthq0CAcGXCUw-BtTJMR4nGTY-0/edit) at a high level. Still need to be split into more granular items.
  + Meeting this Friday to figure out what to attack first and who will do what
  + Goal is to have v1 of this working in angular 1.4
* Router update (Brian)
  + Ongoing, [see public doc](https://docs.google.com/document/d/1-DBXTHaeec6XH5qx2tKVrgrjiILy76_lSrjgJv95RJ4/edit#).
* Test infrastructure (Jeff, Julie)
  + Jeff has a PR ready for review to add Benchpress to Angular 1.x
  + Looking into a Traceur version conflict issue for Angular 2 and removing the build step.

**December 8**

Agenda:

* communication
  + There's confusion around what we're actually doing.
  + Igor working on a doc around guidelines for communication so we get clear messages out there
  + Doc will be public when finished (stay tuned)
* GDEs
  + We now have 7 or 8 Google Developer Experts approved for Angular
  + Will set up a mentorship program attaching core Angular team members to them to enable them with inside scoop to make them even more expert
  + Will associate GDE with team members later this week
* ng-conf talks
  + Send bio/proposal this week via their github site
* jscompiler (closure compiler)
  + Talked with JS style guide arbiters. Positive feedback from most teams. There are many issues to work through. Generally in agreement that we should merge with TypeScript syntax with our added features.
  + Martin writing design doc on how to add AtScript/TypeScript features atop jscompiler
* Material Design: Release 0.6.1
  + We now have CDN hosting for material design! Details at <https://github.com/angular/bower-material>
  + Igor: We should tell folks to only use https so SPDY can work
* Angular 1.x
  + [1.x meeting notes](https://docs.google.com/document/d/1xKEbydyUEOQ_gTbcbxy_k2myctG8EiVbeMgLgXTxIc0/edit#heading=h.dj7yi9zaakth)
  + More bug fix releases coming
  + Revisiting the 'PRs Please' label to make it more useful
  + Doing feature planning for AngularJS 1.4 this week
* AngularDart
  + Code freeze extending through Tuesday 12/9
  + Planning future work this week
* Angular 2
  + Completed tree benchmark with early results. Already better on runtime, gc time, and retained memory than 1.x. Significantly better on memory. Will look at details and start optimizing next.
  + i18n: Pluralization and gender support will go into core template syntax for Angular 2. Will look into how to express in AngularJS 1.x (should hit in AngularJS 1.4). Meeting with bidi experts later this week.
* Other updates:
  + Igor: Discussed service worker thoughts with Addy Osmani. Could app run in a service worker? Would need vDOM or have some hacks to make it work. Can't rely on as browser could kill it at any time...there are some hacks here.
  + Robert: Redoing tabs in the Material Design demo page to bring within spec, browser resize, pagination improvements
  + Brian: Now running tests for Router 2 on AtScript, Angular 1.x. Published demo app called [Phone Kitten](https://github.com/btford/phone-kitten) that uses the new router. Looking into [better animation hooks](https://github.com/angular/router/issues/35). Landed [initial work](https://github.com/angular/router/commit/dcf7e95375c7fbb3e5eca1636709f7290f87d48b) last week. Started [a updates doc to let folks know where we are on the router progress](https://docs.google.com/document/d/1-DBXTHaeec6XH5qx2tKVrgrjiILy76_lSrjgJv95RJ4/edit#).
  + Victor B: Optimized change detection for Angular 2 on Firefox. There was slower on firefox vs Chrome. Now faster on FF.
  + Misko: Spent time with Zach from Famo.us to see how could work well with Angular 2. Started documentation for Angular 2!
  + Rado: Added support for view local template variables (bindings) and reuse of views. Helped Pete land docs infrastructure for Angular 2.
  + Victor Savkin: Fixed bugs in Angular 2 change detection. Can now do ng-repeat! Started support for zones in Angular 2. Should be done this week.
  + Julie: Importing Traceur into google3. Pairing with Jeff in Seattle visit on Benchpress.

## December 1

* Milestone 2 for Angular2 approaches! We think about 2 weeks of work minimum.
  + We should add a Big Table benchmark to our goals for Milestone 2.
  + Tree should be able to finish by end of the week, with some work on pre-requisites for Big Table.
  + Want to include support for other browsers.
  + Do we need zones for this milestone. [We think not, can wait for Milestone 3.]
  + Tobias, Victor, Rado have work to do on the remaining pieces.
* We need to sit down and think through what should be in draft 0 of the Angular2 docs, and get these docs written by end of year. Pete is working on the dgeni infrastructure piece. Misko and Naomi to define this.
* AngularDart is still frozen this week. Naomi is going to run an issue triage this week to decide what we should make our top priority for AngularDart 1.x by end of year. Will pull in Rado and Chirayu and Misko to help on triage.
* CI Server:
  + Ongoing stability issues with the CI tests in the last few weeks due to saucelabs flakiness.
  + Vojta, Julie to investigate running our CI tests on browserstack instead.
* AngularJS
  + Server-side prerendering support in Angular. Should we revisit this? Igor is thinking about it and would like input from the team. Igor, Misko, Martin, and Tobias to talk more about pros and cons.
* Pete:
  + In the process of getting another 1.x release out. DNS DDOS issues are slowing that down.
  + Community effort to reskin the docs as Material Design is underway.
  + Pete is working on dgeni for angular2 proof of concept.
* Julie: Working on some internal infrastructure this week for users inside Google.
* Igor:
  + Back from vacation and focusing on i18n with Chirayu and CLI project.
  + Fixit event in SF was awesome. Lots of productive work on issues. Would be good to pre-screen issues next time to maximize efficiency. Should do this again.
* Misko: Docs for Angular 2 and thinking through what we need in the developer guide. Igor says, please include a glossary this time for consistency :)
* Tobias: Back from vacation, focused on milestone 2 tasks.
* Brian: Back from vacation, porting the phonecat tutorial to use the new router for 1.x.
* Rob: Bug fixes, circular loader for Material Design.
* Vojta: AtScript and related discussions and implementation. Working on an example project to show typical workflow. Will loop Martin in on IDE discussion piece.
* Martin: Joining the team in Mountain View. Getting up to speed on everything.
* Rado: ViewPort for angular 2 is in. Some bug fixes, narrowing in on ng-repeat and ng-if support.
* Chirayu: i18n for AngularJS 1.x. Meetings this week with internal and external stakeholders. Updating the spec doc this week with some new information on decisions re pluralization and gender i18n. Starting on prototyping this week.
* Jeff: Working on the Karma benchpress plugin for AngularJS 1.x. Blocked on an issue with Chrome launcher, working with Vojta. Next step is to integrate with Angular2, and to think through how to use with mobile. Also working on prototyping for difficult use cases with Ben.
* Igor, Tobias, Vojta are going to NYC in 2 weeks. Will be speaking at the AngularJS-NYC meetup and syncing up with folks in NYC.

## November 24, 2014

* Julie: Integrating node.js with Google cloud infrastructure (protos, etc.). Met w/ Marcy on how we could automatically audit apps for accessibility in Protractor. Thinking about integrating ngHint with Protractor as well.
* Chirayu: Has task breakdown for [i18n work](https://docs.google.com/document/d/1mwyOFsAD-bPoXTk3Hthq0CAcGXCUw-BtTJMR4nGTY-0/edit). Working on supporting pluralization and gender. Working on file format / transport that we can use across many use cases. Will review with team after Thanksgiving week.
* Jeff: Experimenting on moving our infrastructure to Docker on Google Cloud. Plans to finish Benchpress plugin for Karma.
* Robert: Rewrote ripple code for [Angular Material design](https://material.angularjs.org/#/). Updated tab navigation to use new spec. Changed animation curves to match the material spec better. Going through some bug fixes. Should push to master later today.
* Victor Savkin: Change detectiong enabling/disabling record ranges so you can disable watching for portions of your app. Can also implement throttling (like once/minute) via this. Working with Tobias on benchmark around view instantiation.
* Rado: Got HelloWorld done for Angular2! Has injection, component, decorator to show off the basics. Implement basic version of ViewPort and working on design explanation to support template-style directives.
* Misko: Spending lots of time discussing Issue 133 with community. I think we’re there on template syntax. Templates must be marked explicitly -- solves issues around variable hoisting. Much simpler for everyone. Thinking about what we need in terms of infrastructure for Angular 2 concepts docs. We want to deliver examples in your language of choice (ES5, ES6, TypeScript, AtScript, Dart, etc.) but we don’t like the idea of maintaining examples in that many languages. Could it be done with a special-purpose transpiler? More thinking to be done.
* Vojta: Working on AtScript in Google. Describing development workflow and properties we want out of it from the developer experience. Wrote basic version of transformer for Traceur that creates goog.module so we can use with jscompiler.
* Pete: Doing a release on AngularJS 1.3.4 in the next hour. Met with folks about redoing the angularjs.org site atop Material Design. Discussing what will go into AngularJS 1.4 ([starter discussion doc](https://docs.google.com/document/d/13UG5sdi9paJdr_NvZ3IqxGnjkQvqJe1GGkQTXdfbnIk/edit)). Will set up Djeni for Angular 2 next week. Hoping we can hook into AST from Traceur and not have to scrape comments. Pete and Rado will collaborate on a design doc.

## November 17, 2014

* Tobias: preparing protoview for template directives in Angular 2
* Jeff: Integrating benchpress into Karma to improve CI processes (Angular 1.3 but generalisable to v2).
* Victor: Last week, merged in most of change detection for A2. Some missing pieces (plug in object.observe) landing this week, need VicB. Victor is also looking at one of the last PRs for Hello World, submitted by vicb.
* Chirayu: Design Doc ready for i18n. (Action: send to the team, put it in the docs folder). Design Review for Wednesday this week. Goal is to have the work broken into subtasks by end of the week and start soliciting contributions. (Naomi to schedule the review.)
* Vojta: Started work on implementing generics in AtScript. Looked into TypeScript extensibility architecture in more detail after Anders' talk. Has been working with Michael on updating internal node.js in Google.
* Brian: Focusing on the new router for 1.3. Improving docs around examples and porting the phonecat app to use the new router so people can look at it and comment. Working on the API around programmatic generation of URLs. Also contributing to animations with Matias.
* Rado: Bootstrapping PR is out for review. Last step on Hello World is a PR from vicb on child watch groups. Next up: view port, view factory, and animations and things that view might need to be aware of. Last week, pushed vicb's tutorials for Dart tutorials and doc.
* Igor: Templating syntax; close to a proposal to resolve issue 133. Will be updating the issue shortly with latest thoughts. Meetup tomorrow, and GDE summit is happening at Google, as well as the ngFixit in SF. Supporting the team.
* Misko: AtScript for internal users, working with Igor on Templating syntax, thinking through web workers. Design Review after Thanksgiving would be ideal. (Naomi to set up.)
* Naomi: program management. Material Design components summit last week. Version 0.6 is landing this week. Following up on security bounties. Posting the TypeScript talk.
* Julie: Working on internal Google use of node.js. Working on enabling stubby calls and protocol buffers. Looking for info from other internal users on what they're interested in.
* Pete: Last Friday's release is going out Monday (today). Working with Jeff on it. Planning now for a 1.4 release next year. Community interest in a docs rewrite for the Angular docs in Material Design style. Jeff will work with Pete on figuring needs for doc server for 2.0. (We should meet after thanksgiving and brainstorm)
* Matias: At GDE summit today/tomorrow. Some time for team discussions on Wednesday and Friday. Will be presenting/discussing animations work in v2 on Friday morning.

People out of office this week

* Tobias OOO starting Thursday
* Igor OOO starting Friday afternoon (will be at the hackathon).
* Naomi OOO from Wednesday.
* Thanksgiving week, who is here? Misko and Brian on Monday only, Jeff, Vojta, Victor, Rado in the office.

Demos

* Victor has a demo for change detection

## November 10, 2014

* Naomi: In NYC working on unifying Google internal and external UI components work and planning for the next year in the Material Design project. Coordinating how Chrome V8 and Closure jscompiler will support AtScript. Meeting with these teams and TypeScript folks later this week.
* Caitlin: Working on some of the hard bugs on 1.x. Struggling with some of the issues that we can't fix until Angular 2 -- will document and open for workarounds. Close to getting template literals working in V8.
* Chirayu: Created a design doc for i18n work on 1.3. Compiled many issues from Google teams, will reach out beyond Google next week. Will write an idealized API that we could implement in Angular 2 and work towards an implementation on 1.3.
* Igor: Helping to kick off i18n collaboration with several folks -- connecting Chirayu with all known interested parties. Participating in command-line working group to help guide where possible. Helping ng-conf folks select talks. Writing backgrounder docs on AtScript.
* Jeff: Getting a Benchpress CI server setup for Angular 1.3 continuous benchmarking. Will move to Angular 2 when finished. Working on instrumenting Angular 2 with AngularHint to focus on performance specifically.
* Victor Savkin: Merged Angular 2 parser into master. Now working on change detection. Looked a bit at forms, and want to have a prototype by end of this week.
* Rado: Did design review for Angular 2 bootstrapping. Now working on implementing. Fixed some Traceur issues in the process. Talked to folks from AdWords about needs for multiple apps in one conjoined application. They seem satisfied. Captured in the design doc.
* Vojta: Focused on AtScript transpiler progress. There is now --atscript in Traceur that enables all of our special features at once. Now finishing reexporting -- when you import and then export the same thing. Supporting folks on the AtScript playground when they have questions.
* Misko: Evangelizing AtScript. Need to put the vision into a doc so we can scale and not have to be there in person every time. Our unique proposition is metadata annotations. Not everyone gets this at the beginning so we need to spend more time defining the value here. Doc forthcoming.
* Tobias: Refactored the compiler - several pieces work together in the pipeline. Plan to land it in master today.
* Lukas: Reviewing patches from Pete & Caitliln, triaging issues on 1.3. Need commit access!
* Pete: I've survived a 2nd week in charge of 1.3! Pushed Angular 1.3.2 on Friday. Will continue with more bug fixes in the next release. Helping Brian and Chirayu coordinate the Router 2.0 and i18n for some future release. We've got somewhere around 10 folks still working on 1.3 after the move of folks to Angular 2. Have a list of issues that would be breaking changes -- we'll need to have a discussion to see if we want to make a 1.4 release in the next few weeks.

## November 3, 2014

* Victor Savkin: Working on Angular 2 parser. Supports simple expressions. Proposing that will move to forms with Chirayu will pick up parser. Will work with Rob Eisenberg and build off his thinking.
* Brian: Backporting router to 1.3. Building on top of AtScript. Revising API for 1.3 to give an Angular 1.x-esque version of what components are that (we hope) makes it easy to align with Angular 2. Adding shim to route recognizer to use $q instead of native ES6 promises.
* Rado: Creating application class for bootstrapping Angular 2 applications. Will have a design doc soon. Expect multiple iterations to get this right. Will also take on change detection if I finish early.
* Misko: Evolving bind- syntax as discussed in [github issue 133](https://github.com/angular/angular/issues/133). Helping early adopters at Google try out AtScript.
* Jeff: Started a design doc on performance practices not directly related to Angular core that would make apps fast by default. Fixing a 1.3 bug on select. Will take on building a kanban wall that integrates GitHub and internal buganizer tracking items.
* Tobias: Developing the template compiler for Angular 2. Simple dirty checking works for text in text nodes, properties in elements, and properties of decorator directives. Working on optimizations and hope to review with Misko and Igor tomorrow. Next will be to support template and component directives, precompilation of templates, and template loading.
* Chirayu: Back from vacation. Will pick up Angular 2 parser. Will collaborate with potentially Pascal on localization in Angular 1.3.
* Igor: Finishing transition of 1.x ownership to Pete. Want to help drive bind- syntax to a close. Will kick of internationalization.
* Pete: Transitioning from Igor! :) Getting my arms around my new leadership role. Giving an external workshop on Friday.
* Naomi: Working on IDE support for AtScript. Launched [Angular Material 0.5.1](https://github.com/angular/material/blob/master/CHANGELOG.md).
* Igor: I want someone to start working to extend [jscs](https://www.npmjs.org/package/jscs) to support AtScript syntax. Maybe Jeff? Will talk more next week. We should reach out to the maintainers to see if they’re okay with accepting this.
* Vojta: Travel. Finishing Source Maps and merging PR [131](https://github.com/angular/angular/pull/131).
* Robert Messerle: Coming up to speed as a Googler. Will go to NYC to kick off Material Design strategy and come up to speed on owning production bits.

## September 15, 2014

* Plan for 2.0
  + Merge the clans
    - The idea is that we double the team by not doing everything twice by combining our JS and Dart teams. We’d write in ES6 and transpile to Dart and ES5 with facade-style implementation for bits that can’t be specified in a language-neutral method.
    - API would be the same between JS and Dart.
    - Core tests would be shared across both systems. Ensures API parity.
  + Roadmap for 2.0
    - Tobias created a spreadsheet with more detailed breakdown of known items we need to be feature complete for Angular 2.0
    - Broken into thematic milestones
      * Decide on module system (ES6 modules likely)
      * Augment Traceur support
      * Blocking features: DI, expressions, dirty checking, compiler, animations, unit testing, mocks, web components
      * Develop the core: forms, built-in directives, persistence, router, Protractor
      * Declare feature complete
      * Early adopters validate implementation: Google-internal, super-frameworks (Ionicframework, Famo.us-Angular, etc.)
      * Declare beta
  + ES6 2 Dart Transpiler
    - Misko gave demo of how we’d do it
    - Write two files for most features - 1 for JS and 1 for Dart
    - Will only transpile logic, not DOM or other API access
    - Compiler is a great example. Directives should be easy. Change detection. Router as well. We are left with only writing facade code.
    - DI will probably need separate implementation on both languages.
    - You can use maps, arrays, and any custom object that you define. Other access will happen in the facades.
    - Angular developers would never use this transpiler. It will only be for developers who work on the Angular framework.
    - Current transpiler supports fields, classes, imports, ===, and many other basic things. Good enough to play with.
  + Angular 2 design
* Checkin on ngEurope
  + Everyone save Chirayu has flights
  + Outlines on presentation due in 2 weeks!
* Rob’s thoughts on Angular 2.0

## September 8, 2014

* Feature requests for $resource and $cacheFactory (Jeff)
  + Considering supporting expiration headers in $resource
  + We’d like to hear from any team who needs expiration support in $cacheFactory - add a GitHub issue if interested!
  + May want to expose an API for discovering what is loaded by caches
  + Jeff will write a mini-design doc to discuss
  + These would not hit 1.3 but would consider for some 1.x release
* Angular 2.0 design strategy (Misko)
  + We want a next level of detail to capture 2.0 beyond what we’ve done in design docs
  + Google Docs is great for paragraphs, but not for code
  + Have started a Cloud9 session with code we can share with interfaces
  + The idea would be that we agree on the interfaces before we get to the coding part
  + Should help to align JS and Dart semantics
  + This spec is really for the Angular team only for now so we can discuss low-level trade offs
  + The plan is to have everyone edit the live Cloud9 and commit to a repo on regular basis

## July 28, 2014

* Decided that we’ll back-port the [AngularJS 2.0 Router](https://github.com/angular/router) to 1.3 in support of [Material Design](https://github.com/angular/material) components.
* Sorted out our hotel for ngEurope. Will announce via Twitter/G+ shortly so others can join us. :)
* Had a long discussion around support for binding to Custom Elements. The short summary is that nobody is completely happy with the proposed bind- syntax (around reasons of style/taste of syntax) but we have no better ideas at the moment. For background, see the [Templating Design Doc](https://docs.google.com/document/d/1xg6y9tBY7U-qOcYlhAEd89kMPIGXWVs1xsgc0zC1Hv8/edit#heading=h.ly64scbw3fh8) and [Templating](https://docs.google.com/document/d/1f5VWROeTI2kJwVKbNsrHuEz5IqtZe14OpoxM9fEYJNU/edit#heading=h.5i8lai5znheb).

## July 7, 2014

Vojta brought up some points that we don’t yet have plans to solve some problems we see in larger apps. In particular, how developers can reason about data flow within an app.

Key points:

* scope hierarchy is a huge pile of shared state that many components from the application
* because of two way data-binding it's not clear what how the data flows because it can flow in all directions (including from child components to parents) - this makes it hard to understand the app and understand of impact of model changes in one part of the app on another (seemingly unrelated) part of it.

demo

* single data flow direction - always from the top to bottom
* each state has an owner - some component - and only that component can change the state

Misko: I can see how we do downwards propagation…create a DAG by doing a digest with exactly 1 evaluation. Its the upwards propagation where we need a solution...needs research.

Vojta: The other thing I want is to have strict separation between of instantiation, logic, and rendering. Rendering should be a side-effect that you can throttle as you want. This would allow us to use requestAnimationFrame() as the throttle to get high performance.

## 

## May 19, 2014

* Templating in Angular 2.0. Last week we covered problems around how custom elements get hold of injector and how they’re part of the injection tree (constructor timing)
  + Proposing syntax whereby Custom Elements can access parents by requesting them through dependency injection in the attach() method
  + Angular directive components can get parent in their constructor
  + Angular directive components will support the attached() call for folks who want a consistent syntax
  + We still have issue with order in which elements are upgraded (constructor and attach called) - that parents may be upgraded after children
  + We’ll fire an angularReady event when all elements have been loaded
  + Parents will get hold of children through a query: annotation on their class
  + Components will be able to add things to their DI node through a providers: annotation
  + Next steps: Implement these changes in the compiler, integrate custom elements with the injector
* Bind-once semantics in 1.3, AngularDart, and \*-2.0
  + Made a one-time binding change to AngularJS 1.3 last week (not released)
  + Can now prefix an observed element and bind one time via a double-colon like:
    - <span ng-repeat=”row in ::column>...</span>
  + In Angular 2, we’re thinking about default prefetching data before we render - should try to implement this early as it may have design implications
  + Discussing if this is the right approach - should the template author be in charge of one-timeness or should the template author decide? We are still debating this
  + A better solution to the whole problem is to make dirty checking faster. We’ll prioritize Object.observe() support in AngularJS 2.0 and support for observables in AngularDart. There are other strategies to make this faster in different scenarios - to be supported in watchtower.js
* Big items between here and 1.3 final:
  + [full list](https://github.com/angular/angular.js/issues?labels=high+priority&milestone=32&state=open)

## May 5, 2014

* Tobias presenting more discussion of using Custom Elements more natively in AngularJS 2.0. We went down this path to prevent duplicate loading of elements - HTML Imports is the only way to go so why not use it for Angular as a core?
* Presented the same example as last week but now using HTML Imports. Like Polymer, we’d have a group of code called Platform containing all the polyfills that we predict will be implemented by browsers eventually.
* Syntax is more verbose than we’d like. We think there’s room for improvement.
* The ng-app goes away. Instead, HTML Imports loads our components (blocking). After modules have been loaded, it compiles the element template. Then the compiled template would be instantiated.
* Misko: Are components registered different from decorators?
  + Igor: Yes, currently as there’s no standard for a call like “registerDecorator()” but we can make an API that looks the same. We can start processing components while the app is loading and we don’t have to wait for DOMContentLoaded event because the platform does it for us now. Better than AngularJS 1.0 as we can do work earlier.
* Misko: Will we have the same issue with having to use a Polymer-like ‘vulcanizer’ compilation step?
  + Igor: Yes, but we do this for JS already. Can be solved by SPDY proxy in the future. HTML Imports don’t make this worse. We were doing it in JS land, now we do it in HTML.
* Misko: How would you bind to <title> or attributes of <body>?
  + Igor: We’d need a special service for these things.
* Misko: It looks like we’re using HTML Imports as the way we load JS dependencies now. That seems off.
  + Igor: There’s currently no imperative API for loading web components. We could ask for that.
* Decision point:
  + How much boilerplate do you add by using HTML Imports?
  + How does this affect unit testing? Do you have sufficient data to construct components without parsing HTML?
* Injectors: Previously, we were working on hierarchical injectors. Via that, directives could get their parent directive. However, when a Custom Element constructor gets called, you do not have access to your parents or children. You do in your attach() call, however. In attach() we then would have initial values for data binding.
  + [many threads of discussion about implications...Tobias/Igor need to document]
* Testing: In the past we didn’t need to talk to DOM, but now components can expose methods that you have to call and you need to do imperative code to invoke functionality on it. Now, an AngularJS 1.x controller would need access to DOM to do its work. An example would be a controller that wants to play or pause a video player element. This can make testing difficult.
  + Misko: The query feature potentially makes this easy as you could inject a mock at test time.
* Next steps: Good examples of unit testing, more examples of how to support components that need the component hierarchy at construction.

## April 28, 2014

* Tobias demonstrated binding to checked property of an X-Tags Web Component through its firing of events on change
* Don’t yet have a good way to de-dup dependencies of components. We can do it for JS, but we can’t for style sheets. HTML Imports can help with this to make sure resources are only loaded once.
* Looking into how we could make Angular components Web Components by default.
  + May be able to use Dom Mutation Observers to know when elements are added to add mix-in (ngShow, etc.) behaviors. For structural directives (ngIf), we need to add at component construction time.
  + We’d create controller for components independent of the DOM to preserve testability. Breaks down when we start to work with custom elements. Controllers would sometimes need to affect DOM to change colors to reflect state.
  + Looked into using an event bus, but there are many edge cases.
  + Unresolved. Further exploration in [Components use cases doc](https://docs.google.com/document/d/1PtaIi4YfgVRlbV4-LiOdhQAqqUAn6PT8__Epdq7yLVQ/edit#heading=h.bujdutrfl2wy) with some good use cases we want to ensure we solve with any final implementation
  + Current thinking is that we’re too close to the DOM for comfort with respect to ability to refactor, extend, test, etc. Needs much more explanation.
* Rob mocked a strategy for integrating Object.observe() into Watchtower.js.
  + Goal is to plug O.o in where available in browsers as replacement for JS-based change detection
  + Will meet with Igor and Misko to review the work later this week
* Rob got a router prototype working atop the current templating (uninteresting demo, but paves the way for nested and parallel routes)
  + Igor brought up that we should potentially support modals and other dialogs as states supported by the router. We’re not sure if this is a good idea yet.

## April 21, 2014

* Discussion about what type of data binding we should support in 2.0. Options are only things that work via Object.observe() vs dirty-checking style we do today. [Doc w/ pros/cons](https://docs.google.com/document/d/1Pmvq6lSpkoS15dWf04dT19qhLlJuMKu4kjNx8wam1Sw). Related is how we’ll do [interoperation between Web Components](https://docs.google.com/a/google.com/document/d/1TwZmJJc4I0-974sq46yVooRy-_eQa4Hw5kS20E1l6zk).
  + Leaning towards optimizing for Object.observe()-style API. Allow old style observation and make report available for what is slow. We will implement this in watchtower.js and test.
  + Data point: calling functions is actually faster than reading properties in Dart
  + Want to have a hybrid that allows full expressiveness, but make it obvious as to the steps needed to build fast apps
* Discussion around bootstrap and config for 2.0. In our [2.0 sample app](https://github.com/angular/templating/blob/master/examples/helloworld.html) you can do manual configuration, but bootstrapping needs to have a place to put config data.
  + Question is around how Web Components could share services without resorting to global state.
  + Not an issue for simple components like buttons.
  + For complex dependencies, like ones that talk to the server, need wiring state.
  + Should we have an automatic convention like writing to window.angular? Let the developers do it manually and create their own convention?
  + Gist is that we will support embeddable components and concept of an app that orchestrates global resources like location.
  + Configuration data should be a general concept of DI rather than a specific concept of an app.
* Demonstrated pre-parsed templates. Current generated source is 4x larger after gzip. Could help in startup time, but still good for template validation even if not. Saves the step of walking the DOM. Need a large scale test to see what this means for large apps.

## April 14, 2014

* Rob announced merging Durandal and AngularJS projects in his [blog post](http://eisenbergeffect.bluespire.com/angular-and-durandal-converge/)

## April 7, 2014

* DI: a lot of refactoring but no changes to the public api
* change detection: dart version is done, no changes to watchtower (js)
* templating:
  + now integrated with zone.js
  + template precompilation demo-able
  + template precompilation means that we could drop a bunch of code from production deployment
* persistence:
  + es6 promises:
    - working on testing strategy
    - talked to Domenic Denicola and I think we conviced him that synchronously testing asynchronous code is not crazy at all.
    - we need to figure out strategy for finding a way to intercept the micro-task scheduling so that we could divert registration to a queue that we could control
* Logging:
  + we are going to use diary for angular v1, we will need to mock out pieces of traceur runtime
* Benchmarking
  + James suggested that we refactor hot infrastructure code (di and compiler) so that we can time phases within this code using simple timers without summing or resuming stopwatches. This would mean that we could instrument production code very cheaply and distinguish between our code and app code. However, it's unclear whether the refactoring that will simplify instrumentation of the code, will impact production performance.
* Routing:
  + design doc and requirements mostly complete
  + prototypes in progress

## 

## 

## March 31, 2014

## updates

* + di: no update
  + change detection: nothing exciting
  + templating:
    - we have demo of recursion!
    - we hit issues with bind- syntax, looking into alternatives
    - Tobias to create a doc with corner-case that we care about and want to support with nice syntax.
  + persistence:
    - Igor worked with arv@ on updating ES6 polyfill in traceur
    - Jeff working on doc for how to use ES6 promises in ng2 and how to test with these promises (the native api assumes async testing which is suboptimal). Discussion: let's try to monkey patch then in tests to see if we can better control promises.
  + routing: Brian worked with Rob, exploring apis at the moment, using v1 as the test bed for now because v2 is not mature enough
  + runtime types: we need to change `assert` function to something else to prevent conflicts with node's built-in `assert`
  + documentation infrastructure: Pascal Precht helping out with docs
  + logging: Merrick+Igor worked on mock reporter and start/end api.
  + benchmarking: console.time/console.timeEnd is way too slow if we are emitting too many events. we are exploring other options.
  + package repo: templating branch now using npm's shrinkwrap for flattening dependencies. we are going to start publishing ES6 code to npm soon.

## March 24, 2014

* DI: Implementation done for async injection. Need to think more about how to make this more valuable.
* Change detection: Will prepare for Object.observe() in Chrome’s M35 and do benchmarks to compare.
* Templating: Tobias demonstrated the Hello World example using the new templating, expressions, and data binding from 2.0!
  + Console debugging/direct access through an ngNode property that gives read and write cache - has list of directives, the view, and the injector for that DOM node.
* Promises: We’re going to use ES6 promises.
  + Current polyfills aren’t suitable except for the one in Traceur.
  + The other ones are too large - they’re facades around existing libraries.
  + The Traceur one is slightly out of date -- we’ll see if we can help update it.
  + Need to benchmark against others like Bluebird, etc.
* Routing: No updates.
* Logging: Will start to instrument templating/change detection now.
* Types and annotations: Have some bugs to work out with using setters - can’t currently use them with watchtower.js. Fix is in a PR, will get this in soon.
* Documentation:
  + Working on how we’ll use eslint/jscheck and how to take advantage of ES6+ to generate docs.
  + Will likely create an ES6+ to ES6 transpiler so we can feed straight ES6 to linters.
* Side discussion: Folks are worried about the + in ES6+.
  + Brad will write a paragraph or two about our intent to provide ES5 and ES6 vanilla paths and that we will switch to a standards-compliant version of annotations and types as soon as they’re available.
* Packaging via NPM:
  + We are looking into using an NPM proxy so we have a local replica of pieces important to Angular and give improved reliability
  + Working through issues of the currently flat name/version space with wrappers around shrinkwrap.
  + Need to reach out to NPM team about making more core support for client-side development

## March 17, 2014

* Brad has a blog post on the story of 2.0. Please give input by tonight so we can post tomorrow.
* DI: Using in a demo with the new templating engine for our first Hello World.
  + Igor: We need to figure out our story with Q/promises. It’s 40K so we can’t use it directly
  + Brian: Ember folks are using something like RSVP that is already on ES6. Maybe we could use that.
  + Jeff: There are promises in ES6/DOM Promises, but they don’t seem stable and polyfills aren’t up to date.
  + Igor: Yes, we need to find something to use in the meantime.
  + Vojta: I can swap anything in in moments. We just need to decide. I like Q’s API.
* Change detection: Parser is nearly done. 4 failing tests to go. Hopefully in tomorrow.
  + Rob: This was a port of the AngularDart version. Still want to go over the abstractions for cleanliness. One-time bindings aren’t yet implemented. I have a plan for that, but not here yet.
* Templating:
  + Tobias: We have a HelloWorld! It uses ShadowDOM. I’ve got ng-if working. Next step would be to be useable outside unit tests and to integrate with data-binding.
  + Misko: Some ambiguity we need to work about about how binding will work, but we’re close.
* Persistence:
  + Jeff: Updated design doc with more on mobile and storage quotas. Looking into parameter parsing. Rethinking how we test http, how we swap connections, etc. We’ll get rid of $httpBackend. Next step will be to figure out promise strategy and implement it.
* Routing:
  + Brian: More work on base use case. Talked to Tom Dale over the weekend. Suggested we just use the router from Ember. Looking into it, though dubious as it doesn’t have a state-based approach. Would be nice if we could share this.
  + Brad: Even if we can’t use it directly, let’s try to build something together that we’d both like.
* Logging:
  + Igor: Talked to Merrick on instrumentation and how we’ll do it. He’ll test the API on his colleagues. Will sync on this tomorrow.
* RTT & Annotations:
  + Vojta: No changes. Minor stuff to be done in Traceur, but no blocking issues.
* Docs infrastructure:
  + Pete: Agreed to write up notes on what Djeni need to support Angular V2. Not done, but will get it done in the next few days.
* Benchmarking:
  + James: [did a demo on measuring framerate from an android phone]. I need a real app that I can build benchmarks around.
* Touch animations:
  + No status update.
  + Should work on this more to prepare for good mobile widgets.
* Package repository:
  + Igor: Looked into shrinnkwrap in NPM for locking version numbers. Need some fixes in NPM itself. We should be able to write a PR to fix these things. We have it working for Angular 1.x, but we need these fixes in.
* Build: Talked a bit about this, but no action items yet.

## March 10, 2014

* DI: Finished async injector as part of DI. Seems ready to use.
* Compiler: New template compiler nearly done. Plan to implement ng-if without data-binding this week as an example.
  + Vojta: What’s the story with exporting components?
  + Tobias: Plan is to get a view factory automatically injected when you request a template. Directives will work the same as we’ll have declared the list of templates used so we can automatically resolve the dependencies.
  + Vojta: Sounds close to HTML Imports. Not using them, but we won’t prevent folks from using them. Just not as the default way. It’s way wordier.
  + Tobias: We can do it on the fly but we can also pre-compile the template and send this down as part of the view factory.
  + Vojta: So we need to make the bootstrap aware of this so things get injected.
* Change Detection: Change detection is not done, but I think it can be used. Check it out at [watchtower.js.](https://github.com/caitp/watchtower.js) Next step will be to support method invocations in the watchers. I’ll then do expression parsing.
* Routing: Finished with Routing doc. Should publish a markdown with pseudocode soon.
* Persistence: Next milestone is finishing initial implementation of ngHttp. I've copied over tests from previous implementation and am about 10% through. Pending no unexpected distractions, should have parity with 1.x by early next week
* Logging: Made progress integrating DI with Logging. Need to use in some other components to get experience.
* Docs Infrastructure (djeni): Using the dgeni project to document itself. Working with Ionic Framework guys on this.
* Benchmarking: Next step to integrate with Chrome Telemetry to get accurate frame-per-second numbers.
* Touch animations: Design doc ready. Built modularly to allow composition to larger use cases. Andy on Ionic wants to help implement.
* Package repository: Pawel hacking an NPM module to flatten the dependency tree and give benefits of Bower on NPM. First implementation was a dead end. have a good path now.
  + Vojta: Can’t we use shrinkwrap to lock dependencies?
  + Igor: No, we want to separate dev dependencies from client dependencies. Need to know what versions available and constraints per version.
  + Vojta: Might we start with shrinkwrap anyway?
  + Igor: Hard to figure out Karma patterns for watching files and when building you don’t know what files to grab for deployment.
* Scaffolding: This is tools that implement recommended conventions. Started collecting links to existing work like ngTailor, etc. Needs a leader from the community to take this.
  + Brian: I have a long requirements doc that I did for the Yeoman guys a while ago that we should reuse on this.
* Build & Deploy: Not there yet.

**February 24, 2014**

**AIs**

* All: finish design docs and get them ready for public request for comments by the end of the week
* Vojta: make changes to the assertion library per feedback provided at routing

**Agenda**

* Angular 2 [progress review](https://docs.google.com/spreadsheet/ccc?key=0AhgtL8yFJbacdEFmaUxJaEI0VVlPZDV5VE1Cd0wyTnc&usp=drive_web#gid=0)
  + more refinement needed for most of the docs, but we should be generally ready for public comments by the end of this week.
* Vojta: Demo and a review of [assertion library](http://vojtajina.github.io/assert)
  + IA
    - assert.string vs assert.String
    - remove assert.define
    - destructured arguments
* Brian: In depth review of [Angular 2 routing research & proposal](https://www.google.com/url?q=https://docs.google.com/a/google.com/document/d/1I3UC0RrgCh9CKrLxeE4sxwmNSBl3oSXQGt9g3KZnTJI/edit?usp%3Ddocslist_api&sa=D&usg=ALhdy28AmKrbxwfGMGolhgESk0ALiiP6kQ)

## February 3, 2014

### AIs

* Igor to move meetings to combine 2.0 meeting to Monday’s meeting
* All to get input on Angular 2.0 design docs

### Agenda

* Internal and external working groups will meet this Thursday
* Little progress on last week’s tasks due to team ski trip
* Jeff/Tobias/Caitlin on 1.x this week, rest of the team on 2.0
* Igor will give commit rights to more folks this week
* Planning an “ngSwarm” triage event to expand folks buring through PRs. Dave Geddes will organize.
* Rumor has it that jQuery will move to Karma test runner
* AngularDart.org site to launch today. Aiming for tonight. Already optimized for mobile devices.
* Next website target will be to apply UI refresh to angularjs.org.
* Design docs update:
  + Persistence: Had working group meeting. Appears that there will be a rich set of contributors from StrongLoop, FireBase, and BreezeJS
  + Benchpress on rounds of comments
  + Brian to get feedback from ui-router folks and others

**January 27th, 2014**

**AIs**

* [pete+matias] finish the angular docs infrastructure migration to bike-shed this week
* [jeff] add simplest possible style check to our build
* [igor] to post and ask community to help with style check rules
* [jeff+igor] kick off infrastructure security review
* [igor] kick off Angular Working Group

**Agenda**

* Team ski trip Tue-Wed, expect high communication latency. Pete, Matias, Caitlin will be around though.
* Discussion about how we generate api docs for docs.angularjs.org and how Pete's new doc generator called bike-shed will make things much much better. Since most of the team is out this week, now is a good time to make big refactoring in the code base needed to finish the migration to bike-shed. Matias will help Pete finish it off. The new docs design created by Jan Kuca will be used instead of the current bootstrap-based design.
* Discussion about lazy loading in Angular apps. We have a hackish solution, the proper solution will be in v2.
* Discussion about how to engage with teams inside and outside of google that could make angular v2 Awesomer
* We are going to add style check into our CI to help automate style checking for PRs.
* Post mortem for 1.2.1 release difficulties. We are going to automate more stuff!
* Fluent Conf - we got an invitation from Peter Cooper. We are going to offer an unconference-style session.
* Angular Working Group update - Igor was sick last week, so the working group will be kicked off at the end of this week once we are back from ski trip.
* Infrastructure security review - Igor & Jeff to conduct an infrastructure security review. There is some low hanging fruit out there (github 2factor auth, github acl audit, https everywhere)

## January 13th, 2013

### AIs

* Hash out implementation for one-time data binding
* Research AMD support for AngularJS 1.3 (#5410 & #4694)
* Matias - Look into dynamic element validation (#1404)
* Look into binding getter/setter (#768)
* Attempt to support date input type (#5256)
* Brian Ford - make websocket service (without fallbacks) (#5411)
* ngTrueValue to be supported in 1.2
* Add support for progress events (#1934)
* Give contenteditable a shot for 1.3, despite the myriad complexities of proper support (#528)
* Igor to share vote-sorted issue list with core team
* Team to review the rest of the vote-sorted issue list to discuss roadmap
* Igor to determine when to fork 1.3

### Agenda

* Discuss 1.3 feature [votes](https://docs.google.com/document/d/1JFnJjrCKfskjDACKEsQptLSGNEXuhdb6OiFDM1Opvf4/edit#), make decisions on roadmap

## January 6th, 2013

### AIs

* [all] Schedule dry run for the ng-conf presentation
* [igor+misko] Make pairing spreadsheet for the team
* [igor] get v1.3 voting numbers

### Agenda

* Rewriting scenario tests in protractor
* Discuss presentations for the ng-conf
* Pairing between team members
* Discuss v1.3 fork

## December 17, 2013 (12/16 Pt 2)

### AIs

* Brian Ford to collaborate with UI-router folks about animation support
* Naomi Black to coordinate efforts to improve our docs generation processes
* Team to meet daily at 4pm for half an hour to review untriaged issues
* Julie and others to start porting scenario tests to Protractor
* Igor and Brian to deliver lightning talks at the next meetup

### Agenda

* Discuss our plan for documentation generation
* Discuss team pairing schedule
* Discuss road to Protractor 1.0
* Make sure the team are all on track for ng-conf talks
* Discuss internall processes around Angular 2.0 development
* Designate core team lightning talk speakers for January meetup

## December 16, 2013 (12/16 Pt 1)

### AIs

* Jeff, Alex and Yegor will collaborate further on data persistence in Angular 2.0

### Agenda

* Planned the [AngularJS 1.2.6 release](https://github.com/angular/angular.js/issues?milestone=31&page=1&state=open)
* Discussion about [streamy-dart](https://github.com/google/streamy-dart) and Angular, areas for collaboration.
* Discuss the core team’s priorities for Q1:
  + Angular 2.0 proof of concepting
  + Performance tooling
  + Polyfilling ES6 for Angular 2
  + Proof of concept/polyfill of Object.observe() (with zones?)
  + Begin Release Angular 1.3.x
* Meeting went over time; another meeting to be scheduled later in the week

## December 9, 2013

### AIs

* Brian to schedule another hackathon (at or after ng-conf)

### Agenda

* Planned the [AngularJS 1.2.5](https://github.com/angular/angular.js/issues?milestone=30&state=open) release for this week. Brian is release master.
* Planned [AngularDart 0.9.3](https://github.com/angular/angular.dart/issues?milestone=9&state=open) for next week. Chirayu is release master.
* From James visiting the Dart team in AAR
  + great collaboration with the Dart team
  + They need concrete scenarios that they can use for improving performance
* Performance improvements (misko)
  + Did lots of experimentation over vacation (some vacation!)
  + Has ideas on how to make digest loop even faster (use linked list instead of array, break down expressions into individual field watchers)
  + Igor is worried that this is too dependent on implementation of the VM
  + Right plan would be to implement this as a strategy for polyfill to Object.observe()
* Post-mortem on Marry Poppins Hackathon (brian)
  + brian, vojta, tobias and chirayu refactored a lot of code to make mary testable and code more accessible to new developers
  + We realized that CLA verification can't be automated via Mary due to privacy and security issues. Igor researched this and came up with an alternative solution via Google App Script. Igor implemented this and put it to production over the weekend. The end result - script that checks all pending PRs once an hour, verifies CLA and post a comment when a new PR is found that doesn't have a CLA. After launching this we got ~40 signatures over the first weekend.
  + Overall we did a lot of work, but not necessarily the work we set out to do. We should do another hackathon to actually build the plugins we need for automation, the codebase is now ready for it.
* Post mortem on 1.2.4 issues (igor)
  + There were problems with code.angularjs.org and bower code drops
  + Both were fixed the same day
  + We have tasks in 1.2.5 to improve release scripts to prevent these issues in the future
* Angular 2.0 update
  + ES6 / Dependency Injection - vojta working on Traceur improvements, had a good discussion with Erik Arvidsson on our contributions
  + node.bind - Igor helped Justin to finish the node.bind prototype for AngularDart. Not implementable yet as it doesn’t cover validations and other bits currently handled through ng-model. Needs more strategy work.

## December 2, 2013

### AIs

* Matias to cut the 1.2.4 release
* Matias to take on adding automated style checking as part of our CI build, or at least break the problem down into sub-tasks
* Jeff, James, Misko, Igor, and Brian to send bios to Brad for inclusion in ng-conf materials

### Agenda

* Short week last week, many still out on holiday
* Planned the [1.2.4 release](https://github.com/angular/angular.js/issues?milestone=29&state=open) for this week
* Matias volunteered as (first time!) release master
* Discussed updates on ng-conf presentation preparations
* Friday is the MaryPoppin-a-thon hack time to upgrade our GitHub babysitter-bot (for external folks, [Mary Poppins lives here](https://github.com/btford/mary-poppins))
* Discussed how to do project tracking for Angular 2.0.
  + Brad presented an ugly spreadsheet (in his subversive plan to get someone else to do something better)
  + Igor volunteered to draw a diagram of what he thinks is the ultimate mind-map-burndown-graph for tracking Angular 2.0
  + Brad thinks it can still be backed by data in his ugly spreadsheet