

INTRODUCING COMMUNITY SCHEMATICS



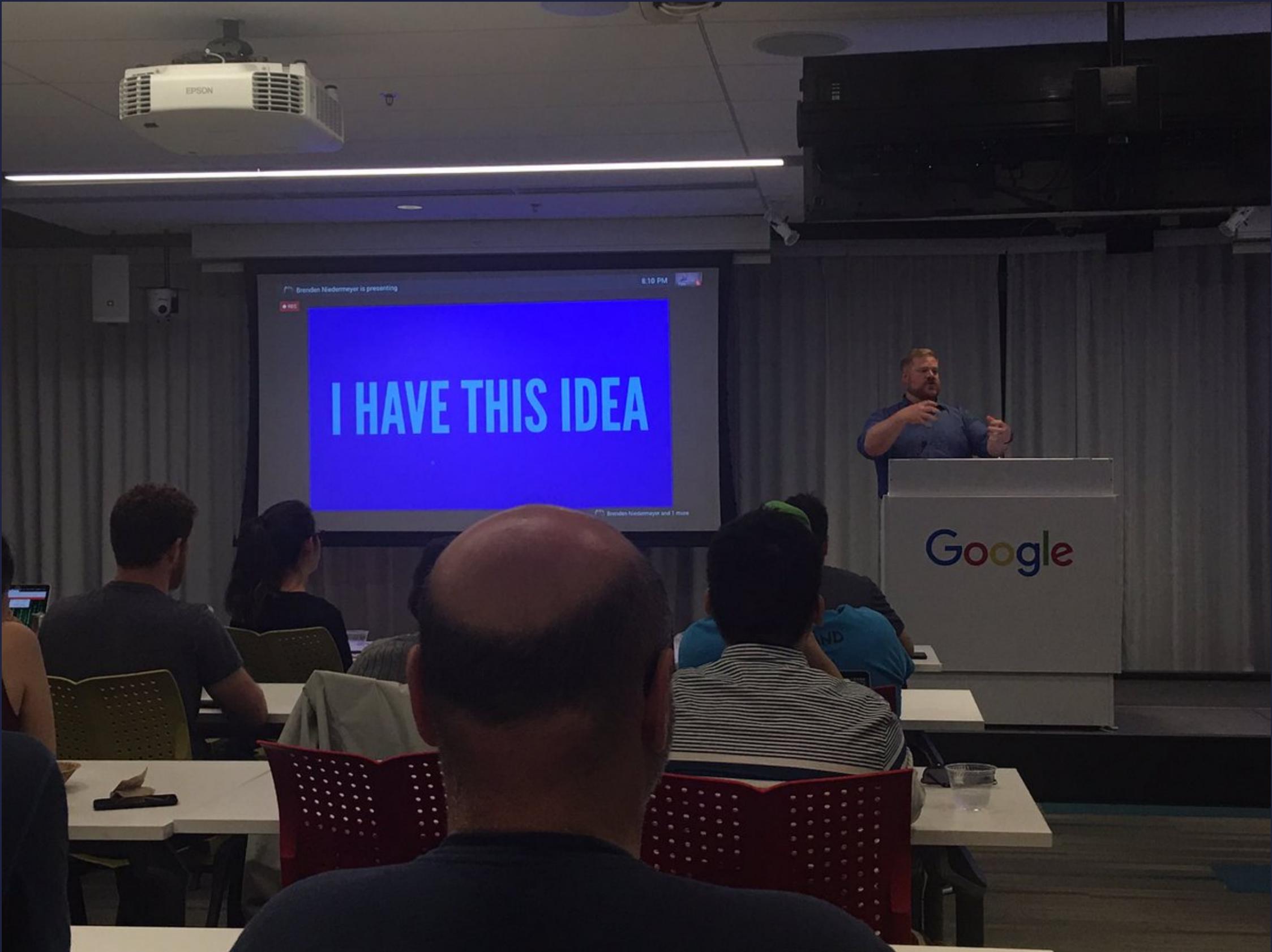
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Seattle's Angular Community

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COMMUNITY SCHEMATICS

A set of `ng add` schematics to help quickly bootstrap websites for community groups and give them a good starting point for building their home on the web.

WHAT'S A SCHEMATIC?

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A schematic is a template-based code generator that supports complex logic. It is a set of instructions for transforming a software project by generating or modifying code. Schematics are packaged into collections and installed with npm.

- <https://angular.io/guide/schematics>

A screenshot of a terminal window with a dark background and light-colored text. The title bar at the top shows the user's name, the computer name, and the current directory: "brendenniedermeyer@Brendens-MacBook-Pro: ~/Desktop/demo-app (zsh)". Below the title bar, the prompt shows the path "~/Desktop/demo-app" followed by a yellow arrow pointing right, indicating the current working directory. The rest of the window is blank, showing only the dark background.

```
brendenniedermeyer@Brendens-MacBook-Pro: ~/Desktop/demo-app (zsh)
~/Desktop/demo-app ➜ master ➜
```

MOTIVATION

- ▶ Help other groups in and outside of the Angular community
- ▶ Fun way to teach schematics with a project

WEB APPS TECH

Meetup wants to charge users \$2 just to RSVP for events — and some are furious

<https://www.theverge.com/2019/10/15/20893343/meetup-users-furious-new-rsvp-payment-test>

If something happened to Meetup, what would we do?

FEATURES

- ▶  Generates a starter website, built with Angular 8, for your group
- ▶  Uses Angular Material
- ▶  Allows links to video hosting services and twitter
- ▶  Displays events from your groups Meetup.com page
- ▶  ng deploy support to deploy your site to Azure, Now, Netlify, or Github Pages
- ▶  Prettier integration

**OXI
CLEAN**



PLANNED FEATURES

- ▶ Easy (and private) contact sharing to help network with people you meet at group events
- ▶ PWA and Angular Universal support
- ▶ Self hosted blogs for groups
- ▶ Calendar management without Meetup.com
- ▶ Email list support

DEMO

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A PEEK BEHIND THE CURTAIN

TERMS

- ▶ **Tree:** Virtual representation of filesystem. Contains a base of existing files and a staging area for updates.
- ▶ **SchematicContext:** The context the schematic runs in. Supplies helpful metadata utils and things like logging.
- ▶ **Rule:** Object that defines a function that takes a Tree and SchematicContext, applies changes, and returns a new Tree.

```
$ npm install -g @angular-devkit/schematics-cli  
$ schematics blank --name=hello-world
```

Rules Factory

```
/**
 * Entry point for the schematic
 * @param options The options that the user declared
 */
export default function(options: Schema): Rule {
  return (tree: Tree, context: SchematicContext) => {
    context.logger.info('Setting up project!');
    return chain([prepareDependencies(options), setupProject(options)]);
  };
}
```

Calling other schematics in the same project

```
/**  
 * Calls the internal meetup schematic with the meetup name provided by the user  
 * @param options The options that the user declared  
 */  
function addMeetup(options: Schema): Rule {  
  const meetupName = options.meetupName;  
  
  return (_: Tree, context: SchematicContext) => {  
    return schematic('meetup', { meetupName });  
  };  
}
```

Calling External Schematics

```
/**  
 * A Rule factory that adds Angular Material to the project  
 * @param options The options that the user declared  
 */  
  
function addMaterial(options: Schema): Rule {  
  return (_tree: Tree, _context: SchematicContext) => {  
    return externalSchematic('@angular/material', 'install', {  
      options  
    });  
  };  
}  
}
```


RESOURCES

- ▶ Repo: <https://github.com/angular-seattle/community-schematics>
- ▶ <https://angular.io/guide/schematics-authoring>
- ▶ <https://brianflove.com/2018/12/15/ng-add-schematic/>
- ▶ <https://www.youtube.com/watch?v=X06tuCohJPQ>

