West Michigan Users Group

GVSU Pew Campus, 119E Devos
04/18/17

Thanks to Meeting Sponsor:

Agenda

Announcements

Google Apps & R
Aaron Clark

Last 10 mins to discuss future topics, presenters, venues, and meetings!

Announcements

Upcoming Conferences/Talks with R Topics

New York R Conference: Apr 21 - 22
New York City, New York
http://www.rstats.nyc/

PharmaSUG: May 13 - 17
Baltimore, Maryland
www.pharmasug.org
Deadline is April 13th for early bird registration!

R/Finance: May 19 - 20
Chicago, Illinois
http://www.rinfinance.com/

ROpenSci Unconference May 25 - 26
Los Angeles, CA
http://unconf17.ropensci.org/

Announcements

New Local R Jobs or Working Remote Opportunities

Posted since our last meeting… via r-users.com & Indeed.com

Freelance	**R and Shiny Application Dev and Support** Zenith Media – Posted by Timmwardion	Melbourne Victoria, Australia	5 Apr 2017
Full-Time	**Technical Support Engineer at RStudio** RStudio – Posted by agadrow	Anywhere	28 Mar 2017

Advanced Analytics Analyst - new
Steelcase - ★★★★☆ 282 reviews - Grand Rapids, MI 49508
Expertise in building customized code in SAS, R, Python, Perl, SPSS, or other data science and predictive analytics languages....
Easily apply
12 days ago - save job - more...

Consulting Analyst - Advanced Analytics - new
Steelcase - ★★★★☆ 282 reviews - Grand Rapids, MI 49508
This includes coaching, mentoring analysts on design and development of analytical solutions using cutting edge technologies for Big Data such as Hadoop & Spark...
Easily apply
12 days ago - save job - more...

Senior Data Analytics Analyst - new
Spectrum Health - ★★★★☆ 497 reviews - Grand Rapids, MI
Collects and analyzes environmental data (competitive, market and consumer) and consolidates information into actionable items, reports and presentations
3 days ago - save job - more...

Call for Presenters!

Lightning Talks

- 10 minutes with 5 minutes for questions
- Short informal topic oriented talks, a couple of slides and/or a demonstration.
- Examples: show off that great new package or code snippet you found (or developed yourself).
- Students! These are a great way to add a bullet point to your resume. The format is essentially the same as conference contributed talks, but we're a LOT less intimidating
- Earn Microsoft R Swag

Call for Presenters!

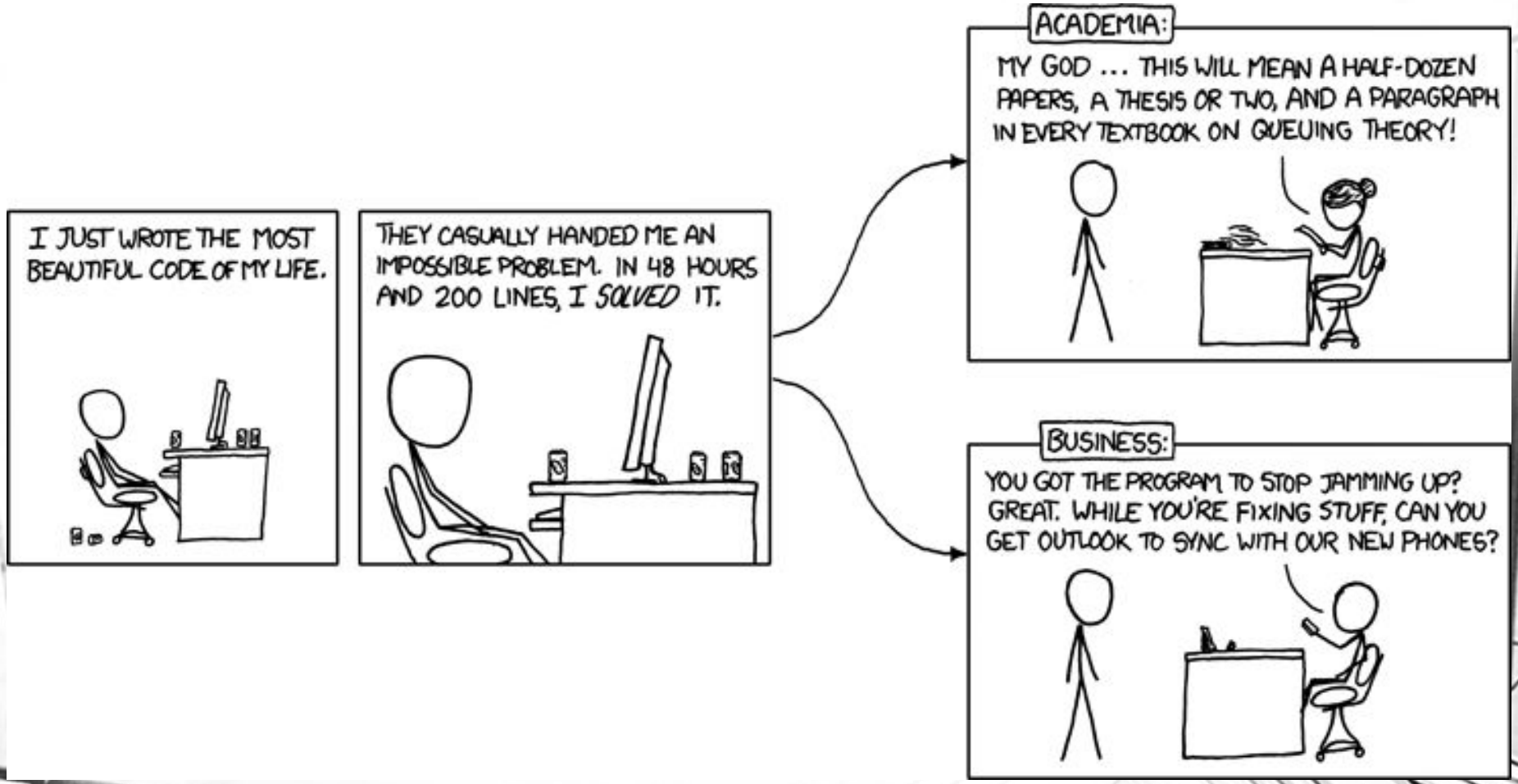
R Use-cases

- 30 - 50 minutes with time for questions
- Longer, going into more depth and are more workflow-oriented.
- Examples: walk us through a recent project or statistical method in R.
- Of course, Earn Microsoft R Swag

1st Talk

Google Apps & R

-Aaron Clark


I JUST WROTE THE MOST BEAUTIFUL CODE OF MY LIFE.
THEY CASUALLY HANDED ME AN IMPOSSIBLE PROBLEM. IN 48 HOURS AND 200 LINES, I SOLVED IT.
ACADEMIA:
MY GOD ... THIS WILL MEAN A HALF-DOZEN PAPERS, A THESIS OR TWO, AND A PARAGRAPH IN EVERY TEXTBOOK ON QUEUING THEORY!
BUSINESS:
YOU GOT THE PROGRAM TO STOP JAMMING UP? GREAT. WHILE YOU'RE FIXING STUFF, CAN YOU GET OUTLOOK TO SYNC WITH OUR NEW PHONES?

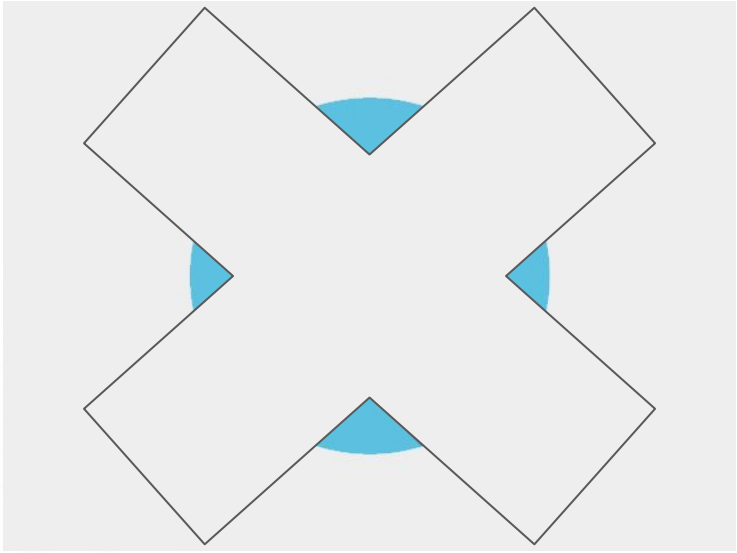
The Problem:

“We need a ‘more fair’ way of distributing extra shifts”

Constraints:

- **Fair**
- **Easy for physicians**
- **Easy for schedulers**
- **Free**

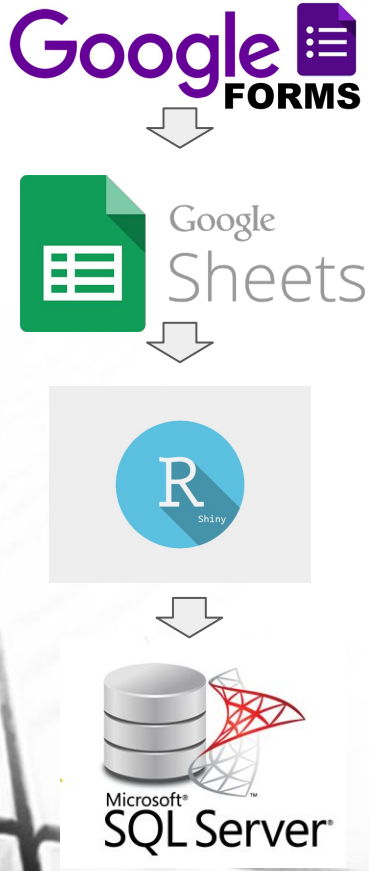
First thought:



Google FORMS

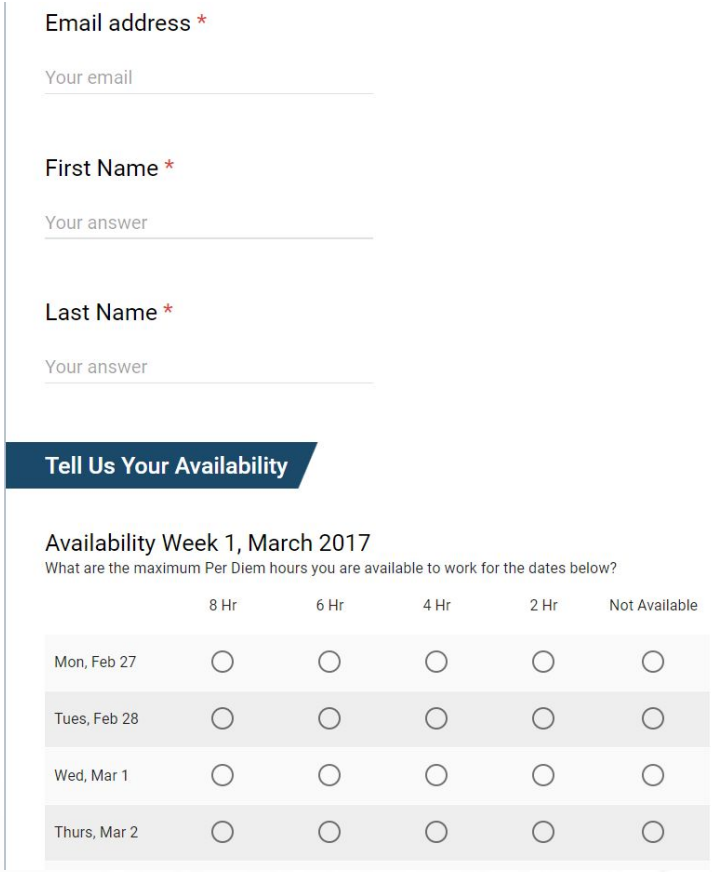
Has to be accessible outside the network!

Multi-Step Process to Achieve Goal Defined



1. Make Google Form to collect physician availability
2. Link form to Google Sheets, collecting data in real time
3. Use “googlesheets” r package to slurp data into R
4. Create Shiny App for Schedulers to View Responses and Assign Physicians to Shifts
5. Save every change or edit by physician or Scheduler for audit trail

The Google Form… Live Demo



Email address *

Your email

First Name *

Your answer

Last Name *

Your answer

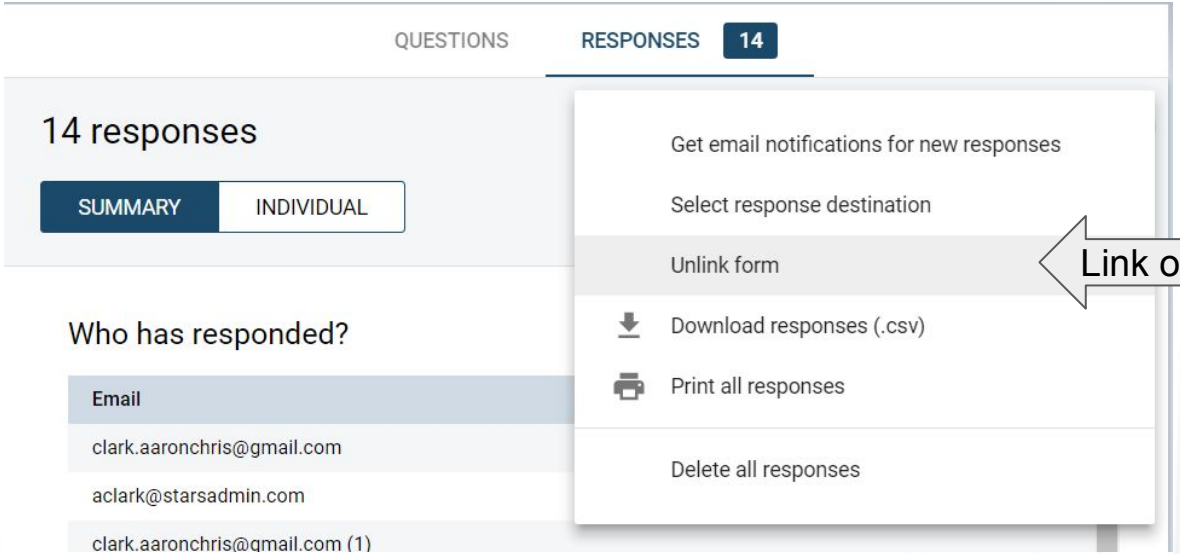
Tell Us Your Availability

Availability Week 1, March 2017

What are the maximum Per Diem hours you are available to work for the dates below?

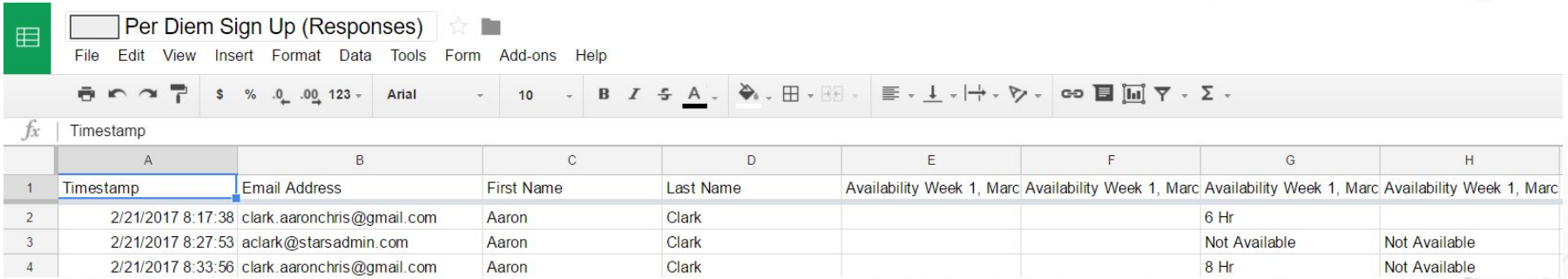
	8 Hr	6 Hr	4 Hr	2 Hr	Not Available
Mon, Feb 27	○	○	○	○	○
Tues, Feb 28	○	○	○	○	○
Wed, Mar 1	○	○	○	○	○
Thurs, Mar 2	○	○	○	○	○

Link Google Forms to a Google Sheet



You must have responses to do this!

Sheet Preview… Live Demo



Per Diem Sign Up (Responses)

File Edit View Insert Format Data Tools Form Add-ons Help

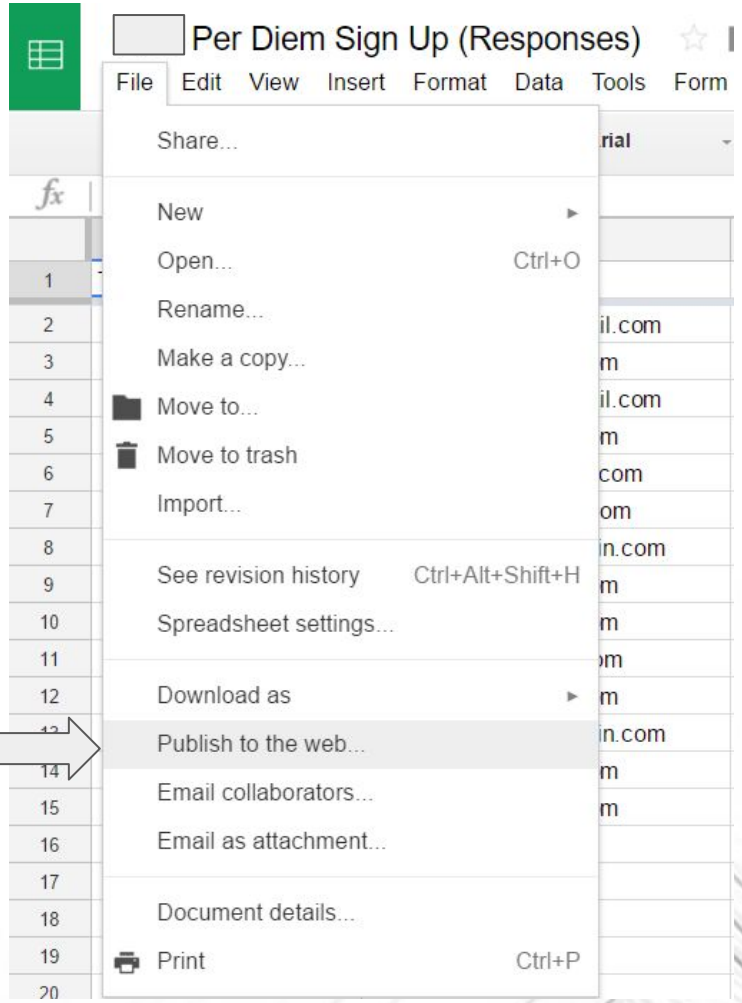
Timestamp

	A	B	C	D	E	F	G	H
1	Timestamp	Email Address	First Name	Last Name	Availability Week 1, Marc	Availability Week 1, Marc	Availability Week 1, Marc	Availability Week 1, Marc
2	2/21/2017 8:17:38	clark.aaronchris@gmail.com	Aaron	Clark			6 Hr	
3	2/21/2017 8:27:53	aclark@starsadmin.com	Aaron	Clark			Not Available	Not Available
4	2/21/2017 8:33:56	clark.aaronchris@gmail.com	Aaron	Clark			8 Hr	Not Available

Publish Your Sheet

Why? Because R needs to access it!

How? Like this...



“googlesheets” R Package

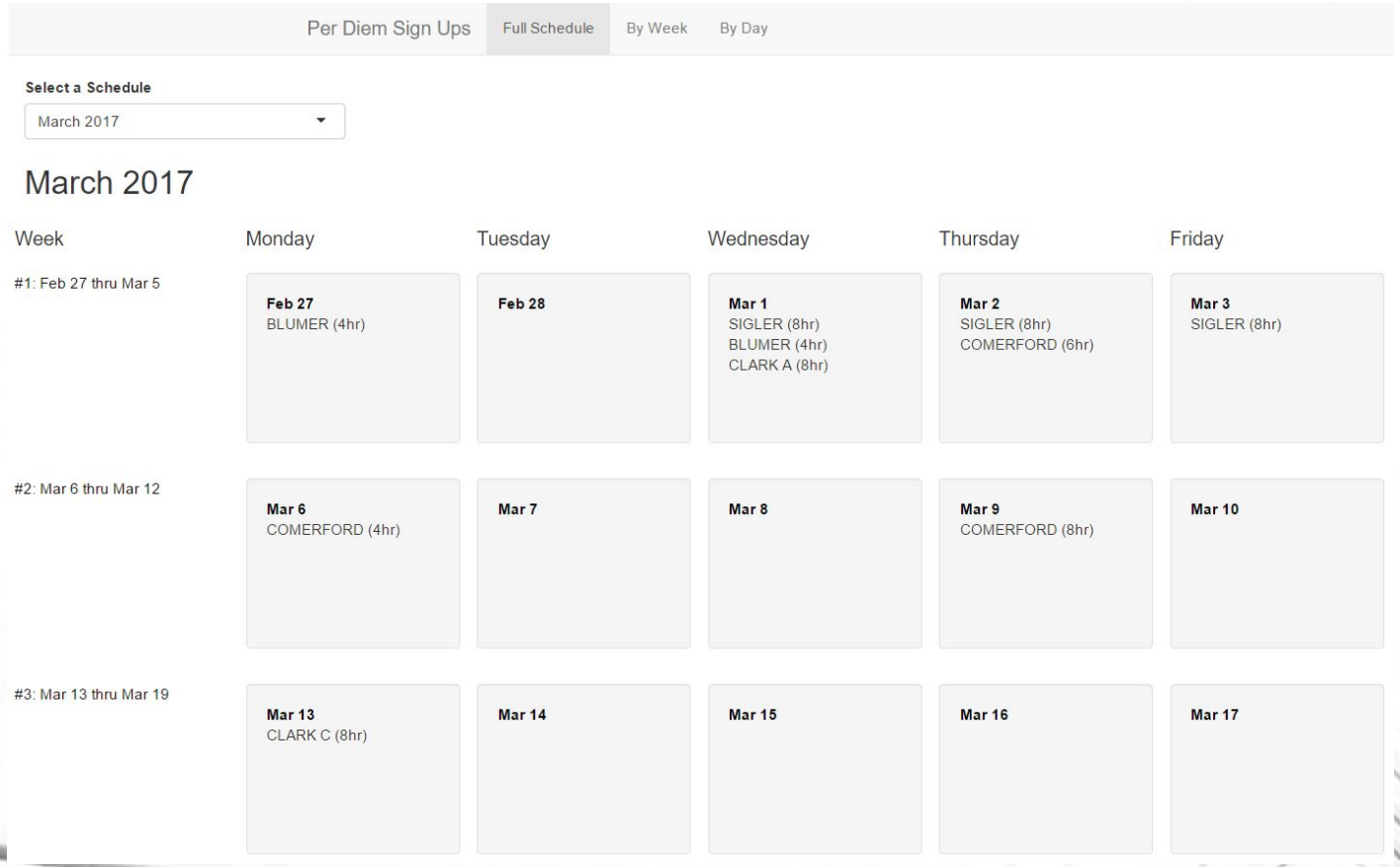
Author: **Jenny Byran**
Employer: **RStudio**
Frequent Conference Speaker

For more info and tutorials on getting started with googlesheets:

https://github.com/jennybc/googlesheets

Demo in R

The Shiny App… Live Demo



Questions?

Have a seat Kermit. What I'm about to tell you might come as a big shock...

Next Meetup

Tuesday, May 16th at a TBD Location

Topic: TBD

Discuss…

future topics, presenters, venues, and meetings!

Meeting Materials (slides/ code) will be available here:
https://github.com/WestMichiganRUserGroup/Meeting-Materials