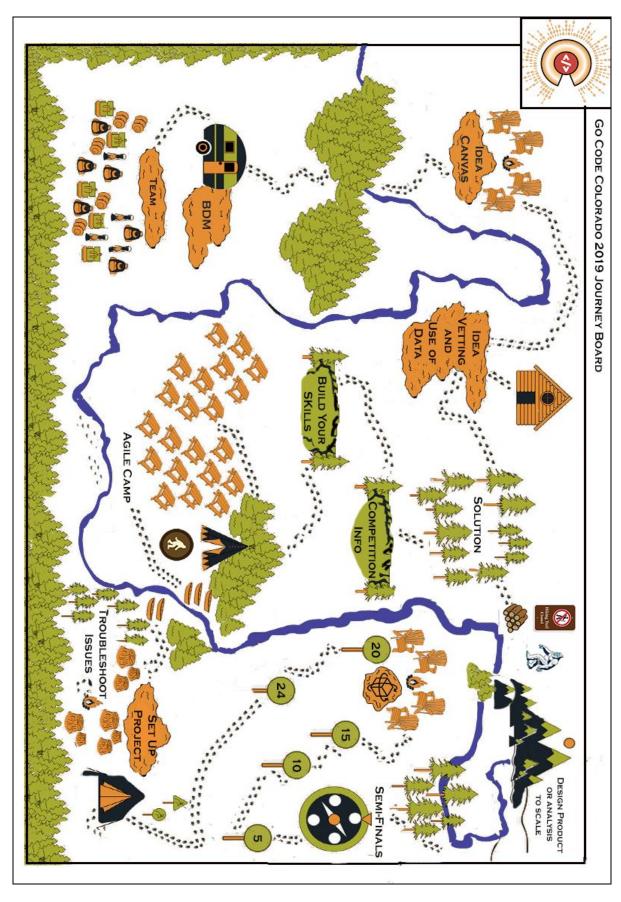


Project Boards

These boards have been created to provide a starting place for competitors with an eye for the prize. The extended content populated in the GltHub repo Project Boards teams create for the competition is found below following the Journey Board. This example repository shows what teams see when they set up their competition repository <u>Go Code Colorado GitHub Project Boards</u>.

Steps	Tasks	Timeline	Sprints and Tracks
Team	Form a team of 2 to 5 people	Challenge Day	Sprint 1
Problem	Find a problem that's worth solving	Challenge Day	Sprint 1
Business Decision Maker	Who is your customer	Challenge Day	Sprint 1
Idea Canvas	Succinct Description of Project Goal	Challenge Day	Sprint 2
Idea Vetting and Use of Data	Validate and Narrow Your Idea	Challenge Day	Sprint 2
Solution	Plan the Prototype	Challenge Day	Sprint 2
How to Be Winning	Scope Your Project to Win	Challenge Day	Sprint 3
Build Your Skills!	Learn and Practice	Challenge Day	Sprint 3
Agile Management	Agile Tools + Plan Your Roadmap	Challenge Day	Sprint 3
Troubleshoot Roadblocks	Work with Mentors	Challenge Day	Sprint 3
24 Day Countdown	Test your Guesses	Post Challenge Day	
20 Day Countdown	Pivot or Persevere?	Post Challenge Day	
15 Day Countdown	Define MVP	Post Challenge Day	Product Track
10 Day Countdown	Let's build something!	Post Challenge Day	Product Track
5 Day Countdown	Pitch	Post Challenge Day	Product Track
15 Day Countdown	Find Meaningful Results	Post Challenge Day	Analytics Track
10 Day Countdown	Telling a Data Story!	Post Challenge Day	Analytics Track
5 Day Countdown	Presenting a Demo	Post Challenge Day	Analytics Track



Journey Board Story

The trek through the journey board begins when individuals form into teams of two or more people (Team) that are interested in helping the same Business Decision Maker (BDM). Journey together through all of the resources available to complete, and storyboard the best two ideas (Idea Canvas). Once teams have at least two ideas that feel like they have legs, they take them into the (Idea Vetting and Use of Data) house to get feedback on one or both of the ideas. The goal is to leave the house with the solution that will be used to carry the team through the first round deep dive project scoping. CAUTION! The Winter Yeti and Log Jam are there to help resist the temptation to shoot for the moon, bypass resource gathering and project setup, and head straight for the end goal of designing a complete project or analysis to scale. Placate this urge by shifting focus in the sessions designed to provide tips to competition success (Competition Info), and new tools for the toolkit (Build Your Skills!). From here it's on to Agile Camp to learn tools necessary to build, scope and run an amazing project on a timeline. Only after learning to paddle from the Colorado Yeti can teams take the canoes down river to the Project Setup Camp where they crash course their idea into a project plan for the 24-day countdown following Challenge Day and leading up to the Semi-Final Submission. This is also where teams connect with mentors to help workshop and troubleshoot all the issues discovered throughout Challenge Day. From there its off to the races - the numbers in the signs correspond to the 24 day countdown, and looking ahead toward Finals and the long-term vision for taking the project to the moon!

- 24 Day Countdown Test your Guesses
- 20 Day Countdown Should you Pivot or Persevere?
- 15 Day Countdown
 - [product track] Define MVP
 - o [analytics track] Find Meaningful Results
- 10 Day Countdown
 - [product track] Let's build something!
 - o [analytics track] Telling a Data Story!
- 5 Day Countdown
 - o [product track] Pitch
 - [analytics track] Presenting a Data Story

Project Boards for Go Code Colorado GitHub Competition Repositories

Team [Challenge Day, Sprint 1]

Form a team of 2 to 5 people

Gather with at least one other person to create a team around an idea or a problem that's interesting to you. It's important to find people that share your common goals and match or complement your energy level. A good team that rallies around a common love for a central goal is what we all aspire to in our work life.

Spend a few minutes asking these questions:

- What's our shared vision? What goal you want to accomplish as a team?
- Talk about each individual's motivation and offering
- Set working expectations What expectations do you, as a team, want to make for your time spent competing? Some suggestions:
 - Agree on when you'll meet.
 - o "Art of the Possible" no idea is stupid, let's consider everything.
 - o Be Present when you're here, you're here, be intentional with your time.
 - Complete the work you said you would complete.

Problem [Challenge Day, Sprint 1]

Find a problem that's worth solving

Go talk to folks who make decisions for their business: the head of a small business or middle management in a large business. Whoever that is, start asking them: How do you make decisions? What information do you use? What kind of research do you conduct? And, very important, what are the gaps that you would like filled? Find the data that can help fill in those gaps, and that's your idea. You can have more than one problem statement, but no more than 3.

2019 Challenge Statement

This year's challenge statement is "Use Public Data to Deliver Solutions or Insights for a Business Decision-Maker".

How to write a problem statement

Choose one of these two formats, and write down your problem:

- I believe [type of people] experience [type of problem] when doing [type of task]
- I believe [type of people] experience [type of problem] because of [limit or constraint]

Business Decision Maker [Challenge Day, Sprint 1]

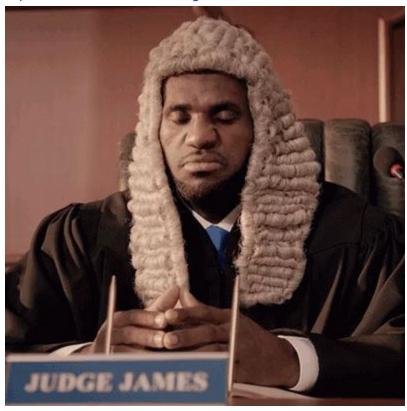
Who is your customer

Ask who is this problem is most painful for?

- For a product -- Who do I think my "early adopter" will be?
- For an analysis -- Who do I think my results will help?

Be specific! Personify your Business Decision Maker as a person that has measurable data points. For example, instead of saying "Teenagers," narrow it down to "Female high school students who own cell phones". What data would be required to provide insight into those questions? Reading the Rules and Judging Criteria can help you get a feel for the audience to target, and check out the Inspiration Station to get ideas flowing!

https://media1.tenor.com/images/a63456fe80c339e6f21dc8dd1cfd33bd/tenor.gif?itemid=8566070



Idea Canvas [Challenge Day, Sprint 2]

Succinct Description of the Project Goal

There are a great many tools available to generate ideas and hone in on a quality problem and solution around which a project can be designed. The more succinctly the project can be described, the better likelihood it has for success. Use the <u>Idea Canvas</u> to accelerate your discovery process (Data > BDM > Problem > Solution > Paper Prototype > Scope > Key Metrics), and prep for the <u>Idea Vetting & Use of Data Session</u> (see next card.

Idea Vetting and Use of Data [Challenge Day, Sprint 2]

Validate and Narrow Your Idea

When you have an idea ready, gather a group of professionals with varying experience in a room to review the idea, and discuss the biggest problem being faced in the upcoming plan to complete the project. Coming out of this session your team should have a strong sense of the BDM problem and your team's analysis/product designed to help with the identified problem. Specific to Challenge Day, teams will complete the <u>Idea Canvas</u> for one or two ideas, and then use their strongest idea in the worksession.

Idea Vetting and Use of Data Session

Solution [Challenge Day, Sprint 2]

Plan the Prototype

Use the solution you've chosen to pursue to guide the plan for setting a scope to enable completing the project within the timeline. Which of the paper prototypes is your team most excited about? Decide as a team on the top 1 or 2 prototype(s). Remember to ask yourself: Does this solution solve the problem for your customer? Prototypes can be used for Analytics Track too - think of it like doing a walk-through of the analysis you want to do. Draw out the logic of the question and add in the data use that support identified metrics or data points. What will your final data story look like when you deliver it?

How to Be Winning [Challenge Day, Sprint 3]

Scope Your Project to Win

Two primary sessions at challenge day are dedicated to all of the details required to submit, and all of the available resources to help you rock it out!

Even if you missed the fun on Challenge Day, we'd want to be sure you got access to the resources covered in the courses. And even if you did, here are the things we covered in the sessions!

How to Compete
GitHub Resources
How to Present
Data Resources

Build Your Skills! [Challenge Day, Sprint 3]

Learn and Practice

The best projects are the ones that challenge us to learn new skills and test new things. Sometime the only reason to undertake a project is that there's no better way to master a new skill than to apply it to a project. Challenge Day opportunities to learn and grow this year are off the hook -- with classes from Digital Ocean and Tableau, free licenses and Data API access like crazy, and so much more!

Check out <u>the schedule</u> for your location for details on what room and when the tutorials are going on! If you can't make one of the tutorials, find the appropriate slack channel for asking questions and getting feedback.

Agile Management [Challenge Day, Sprint 3]

Utilize Agile Tools to Accelerate

Before heading into the Agile Tools Worksession, the primary goal is to have a solid idea for the team to work on. Even if there is a pivot in the future, teams are strongly encouraged to pick something and run with it and use it as a way to maximize their learning. The session will introduce tools and agile methods.

Plan Your Roadmap

Immediately put your new Agile skills to work and plan your roadmap to success for the upcoming work to be done between the end of Challenge Day and the Semi-Final Submission. Following the Agile session work together to build your project boards, and break out tasks for your calendar.

Troubleshoot Known Roadblocks [Challenge Day, Sprint 3]

Work with Mentors

In the best scenario, the work spent at Challenge Day unearthed a great number of issues and rabbit holes for your project that will need to be shredded and solved. If you're lucky, you can get through your project setup and have enough time to take advantage of the mentors available for 1:1 sessions to hack and troubleshoot your most pressing issues. Or any other needs you might have.

You can try to seek out mentors to really work through some of your big kinks in road blocks before you leave today, or reach out to Go Code Organizers to talk about getting in touch with people between Challenge Day and Semi-Final Submission.

24 Day Countdown - Test your Guesses [post challenge day]

By the time you leave Challenge Day you should have a good handle of your problem and solution, in addition to a paper prototype of a solution for either the product or analytics track.

So far though, you've made a bunch of guesses: what problems we think exist, what customers we think have that problem, and what solution we think would solve it.

Before moving on, we need to test those assumptions with some potential customers.

Spend <u>1 hour</u> trying to find people who fit your customer segment and talk to them. Call your friends, find people on twitter, even pick up the phone and call businesses. The more people you can talk to, the better!

20 Day Countdown - Should you Pivot or Persevere? [post challenge day]

What feedback did you receive from the BDMs you are working to help, and from other folks you talked to?

If the feedback confirmed that you're solving the right problem, for the right people, in the right way, while using public data, awesome! Let's move forward.

If you received feedback that makes you want to rethink your problem, customer segment, or solution, now's the time.

Update your lean canvas, and consider going back to the brainstorming and paper prototyping phase to take another shot at it.

Keep iterating until you get feedback that tells you to push on! Keep track of your pivots to share how you arrived at your end solution.



15 Day Countdown - Define MVP [post challenge day, product track]

Define a testable Minimum Viable Product (MVP)

An MVP is the smallest possible increment of your solution that delivers enough value for you to be able to deliver it and learn from customers as quickly as possible.

Agree as a team: from your paper prototype and lean canvas, what's the riskiest assumption you're making?

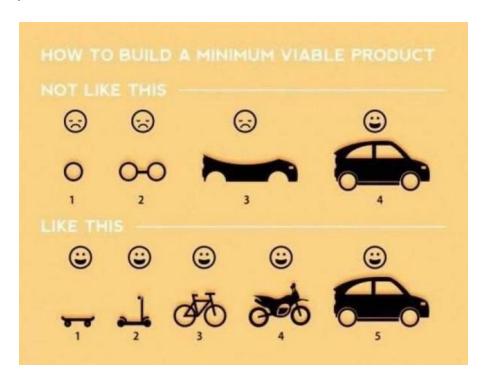
For example, if you were building a device that would automatically pour beer for you, the riskiest assumption might be technical - how do you know how much volume of beer to pour? If you were building AirBnB, the riskiest assumption wouldn't be tech, but instead would be trust - will users rent out a bedroom in their house to a stranger?

Take your riskiest assumption and figure out the smallest increment you need to build to test that assumption.

Take that increment and create cards on your board to represent what your team needs to get done in the next Sprint to build that iteration. Think about what it will

take to test your MVP - it's not just about building something, it's about building something you can use to learn from as fast as possible.

This backlog of work can be used in your pitch too. If you don't finish your entire backlog before it's time to be judged, this backlog defines what's next for your team: how are you going to use the winnings to continue building your product and solving the problem for your customer?



10 Day Countdown - Let's build something! [post challenge day, product track]

You should now have a backlog of cards on your board representing what you need to do to build and test your MVP. Let's get to work!

For best results, timebox your development into 20-30 minute mini-sprints <u>using a timer</u> to continually check on progress and give you the best chance of reaching your goals by the end of the event.

The Simplest Way to a Competition Entry

You'll need some form of live site, but the magic is up to you! Don't forget to use our resources if you don't know where to start:

- (1) get free Name.com domain,
- (2) combine with free hosting credits from DlgitalOcean to create a platform to build your product.
- (3) Spin up that app from your local environment for the world to see!

5 Day Countdown - Pitch [post challenge day, product track]

For Semi-Finals your Go Code Colorado Pitch will be in the format of a narrated powerpoint, and should have the basic components of what makes your product useful to Business Decision Makers you are seeking to help. These videos will be reviewed by independent judges from across the state of Colorado, and they will have a lot of submissions to review to get to the 6 Finalists. Do your best to follow the layout of the ppt template, and make their lives easier when reviewing entries.

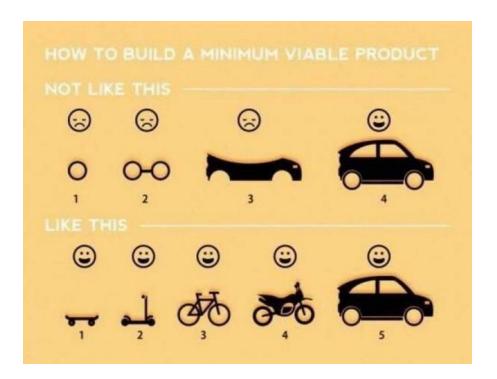
- All of your hard work associated with your entry will be in your repo, make it easy for them to connect the dots between your presentation and your work.
- Make your presentation stand out by being clear, concise, succinct and impactful your ability to relay your work tells as strong of a story as the look and feel. Give good attention to both!
- Test your presentation on someone else before you record it, and record your first version with enough time to have someone else watch it -- make any last changes and tweaks before you submit it.

Looking ahead - think about being a Finalist! For the Final Event presentation, pitching begins for Challenge Day in the evening after networking and demos with the public. For the Product Track presentations (pitches!) each team will get 5 minutes to pitch in front of judges and the public, and 5 minutes for Q&A from the judges.

Presentation Best Practices

15 Day Countdown - Find Meaningful Results [post challenge day, analytics track]

Set up your environment, clean your data, conduct your analysis, document your work. Design your analysis so that you can get useful data points to tell an interesting data story. Don't set out to solve the whole problem all at once.



10 Day Countdown - Telling a Data Story! [post challenge day, analytics track]

This is the core of the Analytics Track -- the ability to tell the story that was learned from investigating the data. A good story follows essential components, and the Business Decision Maker's need and the question answered can be wrapped up with some simple narration and well orchestrated graphics.

The Simplest Way to a Competition Entry

The magic is up to you!

- 1. Get free Name.com domain
- 2. combine with free hosting credits from DlgitalOcean to create a unique domain and site for your competition entry
- 3. Use one of our In-Kind sponsors to create a data visualization: Tableau, Carto, Mapbox/OSM (showcased by KAART), or find a million and one other permutations on this model to make your data story sing. Embed them into the brand/story told through the html of your competition entry website.

5 Day Countdown - Presenting a Demo [post challenge day, analytics track]

For Semi-Finals your Go Code Colorado Data Story demo will be in the format of a narrated powerpoint, and should have the basic elements of your analysis that tell the story of the problem and solution. These videos will be reviewed by independent judges from across the state of

Colorado, and they will have a lot of submissions to review to get to the 6 Finalists. Do your best to follow the layout of the <u>ppt template</u>, and make their lives easier when reviewing entries.

- All of your hard work associated with your entry will be in your repo, make it easy for them
 to connect the dots between your presentation and your work.
- Make your presentation stand out by being clear, concise, succinct and impactful your ability to relay your work tells as strong of a story as the look and feel. Give good attention to both!
- Test your presentation on someone else before you record it, and record your first version with enough time to have someone else watch it -- make any last changes and tweaks before you submit it.

Looking ahead - think about being a Finalist! For the Final Event presentation, Data Story tabletop demo presentations begin in the afternoon before networking and demos with the public. For the Analytics Track presentations (demos!) each team will get 5 minutes to tell their data story and 5 minutes for Q&A from the judges.

Presentation Best Practices