

This guide is for Google Developer Student Clubs Solution Challenge participants.









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Overview





Overview

The Google Developer Student Clubs 2023 Solution Challenge mission is to solve for one of the United Nations' 17 Sustainable Development Goals using Google technology.

Created by the United Nations in 2015 to be achieved by 2030, the 17 Sustainable Development Goals (SDGs) agreed upon by all 193 United Nations Member States aim to end poverty, ensure prosperity, and protect the planet.

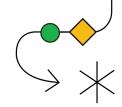
We invite Leads to join the competition and/or host workshops to help their club members participate.



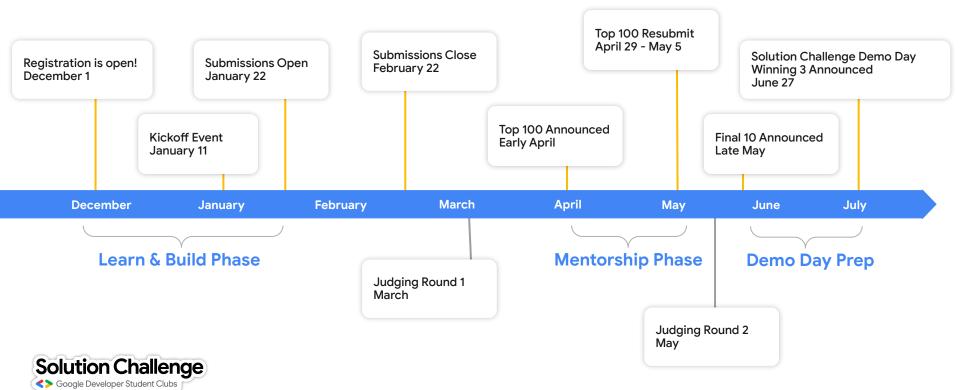




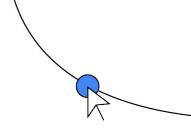




Timeline



Prizes



Top 100

Receive customized mentorship from Googlers and experts to take solutions to the next level, a branded T-shirt, and a certificate.

Final 10

Receive additional mentorship, a swag box, and the opportunity to showcase solutions to Googlers and developers all around the world at Demo Day live on YouTube.

Contest Finalists

In addition to the swag box, each individual from the additional seven recognized teams will receive a Cash Prize per student.

Winnings for each qualifying team will not exceed \$4,000.

Winning 3

In addition to the swag box, each individual from the Winning 3 teams will receive a Cash Prize and a feature on the Google Developers Blog.

Winnings for each qualifying team will not exceed \$12,000.



Submission Criteria

These are the questions on the submission form that you will be asked to provide responses for.

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Project Setup

- 1. Please clearly describe the **challenge you are solving** for using a **problem statement**. (5 POINTS)
- 2. What United Nations'
 Sustainable Development
 goal(s) AND target(s) did
 you choose for your
 solution? What inspired
 you to select these
 specific goal(s) AND
 target(s)?
 (5 POINTS)

Implementation

- 3. Describe the architecture that your team chose for your solution. What are the high-level components of your architecture? What is the responsibility of each component?

 (5 POINTS)
- 4. Which specific **products and platforms** did you choose to implement these components and **why**? (5 POINTS)

Feedback / Testing / Iteration

- 5. Feedback from users, testing, & iteration
 - Walk us through the steps you took to test your solution with real users (outside of your team). Provide three specific feedback points you received from real users.
 - What did you learn and how did it help improve your solution? What are three specific things you implemented and improved for your solution based on the feedback from users?
 (5 POINTS)
- 6. Code testing and iteration
- Highlight one challenge you faced while building your code, including detail on how you addressed the issue and the technical decisions and implementations you had to make.
 (5 POINTS)

Success & Completion of Solution

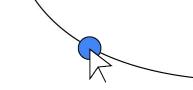
- 7. How does your solution address the challenge you are looking to solve for? Describe the success of your solution using metrics, goals, and outcomes. What Google technologies are you using to track usage analytics? Using relevant (or meaningful) statistics, concrete data or numerical examples where possible. Or, where numbers aren't possible to use, please describe your project's impact using cause and effect. (5 POINTS)
- 8. Upload a copy of your demo video (maximum 2 minutes). Make sure the video demonstrates a working application and how a user will interact with the solution. Make sure the video also makes effective use of the chosen Google products. Feel free to include infographics or visual representation of the data in your demo video.

Scalability

- 9. What do you see as the future / next steps for your project? How would you expand your solution to reach a larger audience? (5 POINTS)
- 10. Explain how the **technical architecture** of your solution could support (in its current state or with minor changes) **scaling to a larger audience**. (5 POINTS)



Judging Criteria



A panel of judges from Google will use the following criteria to evaluate and score all submissions.

Impact - 25 Points

- Does the entry establish a clear challenge using their problem statement? (5 POINTS)
- Do they explain clearly which UN Sustainable Development goals and targets they chose for their solution and why? (5 POINTS)
- 3. Feedback from users, testing & iteration (5 POINTS)
 - a. Does the team clearly describe three feedback points they received from real users and the steps they took to test them?
 - b. Is there evidence of what the team learned and how the solution was iterated upon based on user feedback?
- Does the solution address the challenge (and problem statement)
 identified by the team? Does the team adequately describe the success of
 their solution using metrics, goals, and outcomes, or through cause and
 effect? (5 POINTS)
- 5. Is there evidence of next steps? Does the team display a clear plan for future extension to a larger audience if they were to continue? (5 POINTS)

Technology - 25 Points

- Does the team clearly describe the following: architecture, high-level components, responsibility of each component, specific products and platform they implemented?
 Has the team clearly explained what Google technology they used and why? (5 POINTS)
- 2. Does the solution **implement all the technical components** needed to solve the challenge? (5 POINTS)
- 3. Code testing and iteration (5 POINTS)
 - a. Does the team highlight one challenge they faced while building their code, how they addressed the issue, and the technical decisions and implementations they had to make? Did the team include guidance on running their code?
- 4. Does the video demonstration show an actual working application (not a mockup) and how a user will interact with the solution? Does the demo show how the solution makes effective and appropriate use of the features of the chosen Google technology or platform? (5 POINTS)
- 5. Can the solution, in its current form or minor structural changes, **support more users and increased scale**? (5 POINTS)



Creating a Problem Statement

It's important to start with creating an effective problem statement.

A good problem statement:

- Presents an opportunity of some significance, urgency, and priority
- Relates in the simplest terms possible, the process of concern and impact on the community
- Includes enough data so the audience can understand the size and scope of the problem, together with the degree or magnitude of the problem
- Should not be more than one paragraph (as little as
 2-3 sentences, as much as 5-6 sentences)

How to structure a problem statement

- Who is experiencing the problem?
 - What segment/s of the community, how many?
- What is the problem?
 - Describe issue being experienced or need going unmet
- Where/when is the problem occurring?
 - o Context, situation, or process in which the problem exists
- Why is it a problem? Why is it important to address?
 - Impact to community, region, businesses, organizations





Resources





Resources

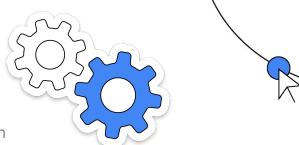
Use the resources and tools to prepare for events and build your Solution Challenge project solutions.



- Tools, Videos, and Learning Materials
- Guidelines for Submitting a Solution
- Frequently Asked Questions







Google Domains

Interested in getting a Google Domain?

Would you or members in your columnity lanefit from having a Google domain? The Google Registry team is present Google domains (.dev, .app, or .page) for 1 year. Fill out this form receive more information.

Coming Soon!

Get **inspired** by this developer story!



More information about Domains for Devs HERE



Google Cloud credits

Google Cloud team is offering credit vouchers for Solution Challenge teams who plan to use Google Cloud for their project solutions. There are limited vouchers and credits will be offered on a first come, first serve basis.

- Register for Solution Challenge gle/SolutionChallenge and be sure to mention that you are interested in sing Gorgle Cloud for your solution
- Review your country's eligibil for Cl
- Form a team with up to 4 studential
- equest form (when available) Have your Solution Challenge team representation of the second of the se
 - Please make sure only one student from our ear file or that new Google Cloud redemption form (entries from multiple students of the same land) I disqualify you from redeeming credits)
- After you submit the form, upon availability, the team will receive a logic oud diledemption link via email
 - Credits will need to be redeemed within 90 days of issuance, and credits for 180 days from the date of redemption
- **Additional Resources**
 - Get access to Cloud training here
 - Best practices for using your Google Cloud credits

Cloud Credit Checklist

- Register for Solution Challenge
- Review eligibility
- Form a team
- One representative from team fills out request form (when available)
- Team will receive credit redemption link via email
 - view Additional Resources





Timeline Checklist



- Step 1: Join a Google Developer Student Club (anytime!)
 - Step 2: Start hosting info sessions, hackathons, and design days (November-December)
- □ Step 3: Form a team (December)
- Step 4: Select United Nations Sustainable Development Goals (December)



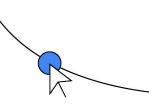
- Step 5: Identify a Solution (December)
- Step 6: Learn & build (January)
 - Design the front-end interface
 - ☐ Design the back-end technology
- Step 7: Test your solution (January February)
 - Step 8: Iterate (January February)

& Judging

February - June

- Step 9: Record a demo video and submit project between January 21 and February 22nd
- Step 10: Top 100 solutions announced (Early April)
- □ Step 11: Top 100 mentoring (April)
- □ Step 12: Top 10 finalists announced (Late May)
- □ Step 13: Top 3 winners announced live on YouTube (June 27)
- □ Step 14: Celebrate all the 2023 Solution Challenge participants!

FAQ



Can my solution solve a problem outside of the scope of the 17 Sustainable Developer Goals?

For Solution Challenge 2024, we **require** your submitted solution to solve for at least one or more of the 17 SDGs. When you have submitted your solution, please review all the 17 SDGs to understand which SDG your solution is focused on and what SDG targets you are looking to solve for.

Can one student or team submit with multiple submissions if they've contributed to both projects?

Terms and Conditions state "LIMIT ONE (1) ENTRY PER PERSON," so each student can only be a part of one submission.

Can I still participate in the Solution Challenge if there is no Google Developer Student Club at my university?

Yes, as a student you can still participate as long as you team up with **at least one** student member at an existing GDSC university. We recommend that you reach out to the GDSC lead for guidance on how to join or form a team with their community.

To read the full list of frequently asked questions head over to the FAQ page at qoo.qle/SolutionChallenge.

If you have a question that is not answered below, please reach out to your GDSC Lead or email GDSC Global team at developerstudentclubs-support@google.com.

More FAQs here Frequently Asked Questions

