

Academies Hacks 6

May 18, 2024 (8:45 am - 8:45 pm) May 19, 2024 (12:00 pm - 5:00 pm)

Academies of Loudoun 42075 Academy Drive, Leesburg, VA 20175

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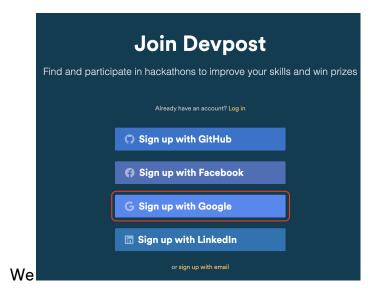
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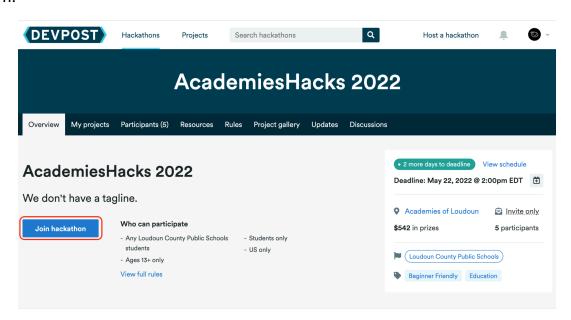
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Project Submissions and Judging

Projects will be submitted through DevPost. If you haven't already, please create a DevPost account using your school Google account [Sign-up Link].

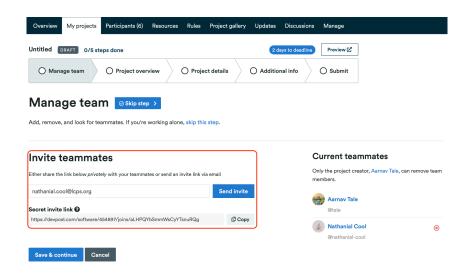


Once you have an account, join our hackathon at https://aclhacks.devpost.com/. Select **Join Hackathon** and fill out the required form.



To create a project, click the **Create project** button.

On the first screen, you'll be able to invite your teammates. You can either send them the secret link or invite them via their LCPS student emails.



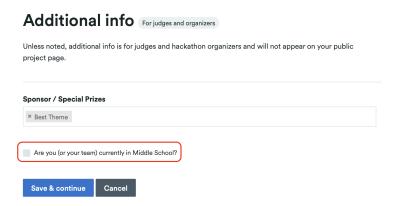
Fill out all of the information in the **Project Overview** and **Project Details** tabs. A template has been provided for the main project description, please follow that, but feel free to expand upon the description should you feel the need.

Another required part of the submission is a video explaining what you (and your team) have built. This is your time to show off what you have been making for the past two days!

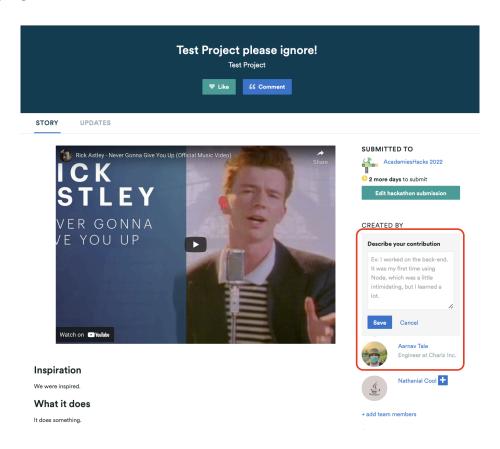
Note: Youtube video uploading is not working. Use Vimeo, Google Drive, or something else.

If you are submitting your video as a Google Drive link make sure that the share settings are set so anyone with the link can view it. If you need assistance creating and uploading a video just ask the help desk.

On the **Additional Info** tab, make sure to answer if you are in middle school or not. If you do not check this box, the judges will not consider your submission for the *Best Middle School Hack* awards.



Finally make sure to add your own personal contribution to the project via the project page!



Final Submission Considerations

• You'll be able to edit your submission all the way until the submission deadline on Sunday at 2PM, but it will lock afterwards.

- Make sure you select the additional prizes that you want to be judged for in the **Additional Information** section of your submission.
- Make sure to leave enough time to record a video and complete the description section of your submission. (If you are in a team, it might be a good idea to let someone take care of that.)

Letter from the AcademiesHacks Team

Dear Student Hacker,

Welcome to AcademiesHacks 4! The goal of this hackathon is to make friends, create something interesting, learn new technologies, and most importantly have fun! We hope you're excited to join us.

This document contains important information you should know before May 21st. Please refer to the table of contents to find information about the schedule, workshops and activities, judging, and more.

Action Items:

- If you have not already submitted the <u>Permission Click</u> form with your parent's email, please do so now. You are not considered registered until the Permission Click form has been correctly completed.
- **Doors will open at 8:30 am.** The opening ceremony starts at 9:00 am, and we heavily recommend every participant attend the ceremony. This is where we'll set-up WiFi, answer questions, etc. If you have to leave early, you may do so, but you will not be permitted to return.
- Please review the <u>Major League Hacking's (MLH) Code of Conduct</u>. All participants must abide by these rules and follow our safety protocols (see page 5). Failure to do so will result in removal from the event.
- Create a DevPost account and get ahead of the game!
- Check <u>academieshacks.com</u> regularly for updates!
- Feel free to **reach out with any questions or concerns**. Both this document and the website will be continually updated until the event.

Best.

Anoosha Thumma and the AcademiesHacks Team
AcademiesHacks Student Director

Hackathon Basics

What is a hackathon? A hackathon is best described as an "invention marathon." A hackathon is an opportunity to learn, build, and share their creations in a relaxed and welcoming atmosphere. At AcademiesHacks, you'll create in teams of 1–4 over two days. You'll have the opportunity to learn from workshops and mentors, and use your knowledge to win prizes!

I already have a project in mind: If you already have a project idea, awesome! We encourage everyone to start thinking about what they want to build. However, we ask that participants don't write any code before the event; we want to keep it fair for everyone. If you don't have an idea, no worries! We have mentors and tons of workshops to help you brainstorm at the hackathon.

I don't have coding experience: No programming experience is necessary for AcademiesHacks. In addition to mentors, we have plenty of beginner, intermediate, and advanced workshops to help you get started.

What should I bring? TL;DR: Packed food if you'd like, a laptop and a charger, any other equipment you want for your project, and medical equipment.

- Will food be provided? Food and drinks will be provided free of charge. In order to accommodate a majority of students, pizza will be provided for both lunch and dinner on Day 1. Snacks will be provided on both days as well. If you have specific dietary restrictions, we ask that you bring your own food. You can also bring extra snacks and drinks for yourself!
- Do I need to bring my own laptop? We strongly encourage all participants to bring their own laptops and <u>CHARGERS</u> (phone and laptop!). We have laptops and chromebooks available for those who cannot bring their own device, but we have a limited amount. Additionally, we recommend that you bring a laptop that is NOT a chromebook so you have access to different software.
- Can I bring other equipment I want to use for my project? Yes! We recommend this. We only have a limited number of finches and drones.

• I need an inhaler or Epi-Pen: We want to ensure everyone is safe at AcademiesHacks. If you use an inhaler or an Epi-Pen or have any other special medical needs, please come prepared!

Can my parents come? Parents are welcome to come in during registration and attend the awards ceremony on Day 2. However, unless they are registered as a volunteer or mentor, your parents can't stay around.

We also encourage participants to ensure that they have a ride to and from the event. We have limited parking spaces and most will go to volunteers.

Important Safety Information:

- 1. Participants cannot go in and out of the building.
 - a. Participants can only leave and come back WITH their parents.
- 2. You cannot wander around the school.

Communication and Help

Please join the Remind! Text @aclhacks to 81010. We will be using Remind to send important announcements about project deadlines, schedule changes, upcoming activities and workshops, etc. throughout the day. Participants can also ask questions and request help through the Remind.

Mentors: If you need help with your project, we'll have mentors available to help at the start of the event. You can visit the help desk to talk to a mentor.

Schedule: Day 1

Beginner
WorkshopIntermediate
WorkshopFun WorkshopActivityAdvanced
Workshop

DAY 1					
8:45 am - 9:15 am	Student check-in				
9:15 am - 9:45 am	Opening ceremony				
9:45 am - 10:30 am	*Scratch (1307)	App Development (React Native) (1305)	*Intro to Google Apps Script (1308)	*Coding Pong with Pygame (1203)	*Algorithms and Data Structures (1306)
	*Intro to Python (1309)	*Conceptual Machine Learning (1202)			
11:00 am - 12:00 pm	App Inventor (2311)	Intro to Java (1203)	Game Design (1412)	Intro to Music Production (2312)	
	Trivia (1307)	Drones (Auditorium)	Mario Kart (1306)	Wii Sports (1308)	← NO SIGNUP REQUIRED!
12:00 pm - 1:00 pm	Lunch				
1:00 pm - 2:00 pm	Intro to Web Dev. (2311) (Meet outside auditorium)	Intro to Competitive Programming (1416)	Drones (Auditorium - Right)	Al Art (1413)	*Intro to Github (1203)
2:00 pm - 3:00 pm	Cup Stacking (Cafeteria)	Geoguessr (In front of auditorium)	White Hat Hacking (Auditorium - Left)	Code Art (Blue Commons)	Intro to AWS (1203)

3:00 pm - 4:00 pm	*Python for Data Science (1202)	Python Programming with Jupyter Notebook (1203)	Jackbox Game (In front of auditorium)	Multiplayer Wordle (Blue Commons)	Mafia (Blue Commons)
4:00 pm - 5:00 pm	Jackbox (In front of auditorium)	Tetris (In front of auditorium)	MS Paint Competitio n (Blue Commons)	Mario Kart (Blue Commons)	
5:00 pm - 6:00 pm			Wii Sports (Blue Commons)	TypeRacer (Blue Commons)	
6:00 pm - 7:30 pm	Dinner				
8:30 pm - 8:45 pm	Doors close				

* = a few spots are still open!

Schedule: Day 2

DAY 2					
12:00 - 12:30 pm	Student check-in				
12:30 - 2:00 pm	Deadline to finish coding and submit projects				
2:00 - 2:30 pm	Snack				
2:30 - 4:00 pm	Tetris	Mario Kart	TypeRacer	Cup Stacking	Coloring
4:00 - 5:00 pm	Closing ceremony and awards				

The schedule for both days can also be found at <u>academieshacks.com</u>! It will be updated continually through the day of the event, and any changes to the schedule during the hackathon will be announced on the Remind.

Workshops

Workshop Capacity: With the in-person hackathon this year, we have a 20-30 person capacity for each workshop. A <u>workshop sign-up form</u> was sent out to attendees and parents, and we encourage participants to fill it out ASAP. Once a certain workshop has reached capacity, it will be removed from the form.

Workshop Information: The workshop sign-up form also includes a <u>folder</u> with outlines for each workshop. These outlines also list prerequisites and skills workshop participants should have. It is important that participants attempt to complete any software installation or other prerequisites before arriving to ensure there's enough time for instruction during the workshop.

Prizes

Award	Prize
Best Overall Hack	1st: UranHub Drone w/ Camera 2nd: Echo Dot (3rd gen) + Smart Light Bulb 3rd: FireStick (4th gen)
Best Middle School Hack	1st: Echo Dot (3rd gen) 2nd: Redragon S107 Gaming Keyboard and Mouse 3rd: Miady Power Pack
Best Theme Hack	AirTag
Best Visual/Aesthetic Design	Gimbal Phone Stabilizer with Extendable Tripod
Greatest Potential Impact	ELEGOO Uno Project Super Starter Pack
Best Game	Razer Gaming Headset
Best Hardware Hack	Arduino Uno
Best Health Hack	Amazfit Fitness Tracker
Best School/Education Hack	Rocketbook
Most Workshops Attended	AirTag

- **Best Middle School Hack:** Teams are only eligible for these awards if every member of the team is a middle schooler or a beginner.
- Most Workshops Attended: After every workshop you attend, fill out the workshop attendance form. A QR code to this form will be provided in each workshop. The form requires you to upload some proof of completion (screenshot of code, image of you at the event, a fact you learned, etc.). If there is more than one winner, we will do a random lottery to determine a winner who receives the prize.

Prizes will be distributed at the awards ceremony at the end of Day 2. You must attend the ceremony to win a prize (so attend!). If you can't be present due to some extenuating circumstance, contact nathanial.cool@lcps.org.

Project Examples

You can create anything you want to! You don't need to create a super serious project. Here are some interesting example projects:

Silly Projects Examples

Robot Shoots Water On You -> Winner of HackKU, Hack TJ 8.0

Tarun Ravi's (ACLHacks 2021 president) YouTube channel with silly robots

Annoying People with Pi -> Subscribe on Youtube

Machine Learning Projects Examples

<u>PoseCheck -> Winner of Hack TJ 8.0</u> Image Classifying Pokédex -> Winner of New Year New Hacks

Web/App Dev Projects Examples

<u>Crash Central -> Winner of HackTJ 8.0</u>
Power Contest -> Winner of HooHacks 2020

Hardware Projects Examples

<u>Ar(m)duino -> Winner of New Year New Hacks</u> <u>Generating Electricity By Walking -> Winner of HarmonyHacks</u>

Beginner Projects Examples

<u>Factoring Calculator -> HarmonyHacks</u>
<u>Breadboard Simulator -> Silicon Valley Hacks</u>
<u>FlappyGalaga -> Winner of Hack BI IV</u>

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