



Girls Make Apps Workshop FAQ

The Technovation Girls Make Apps Workshop is a “coding party” where students, mentors and teachers come together to learn App Inventor 2—the programming language they will use to create their mobile apps for the challenge.

When is Girls Make Apps Workshop?

The Girls Make Apps Workshop typically takes place on a Saturday sometime in between November and January, for 3-4 hours. We suggest holding the event from 10:00am – 2:30pm and perhaps allowing time at the end if students want to stay late. Every group will be different, so allowing extra time is never a bad idea.

Where is Girls Make Apps Workshop?

The event can be held in any safe place with reliable Wi-Fi access. Typically, schools or libraries are a good place to host. If there are other teams or schools interested in participating you may want to reach out on the Technovation forum and organize a Girls Make Apps Workshop in collaboration with other local schools, libraries, or community organizations who can host.

Who should attend Girls Make Apps Workshop?

Teachers, students, and mentors all attend the Girls Make Apps Workshop, and everyone learns the basics of App Inventor 2 together.

Who runs the Girls Make Apps Workshop?

Technovation provides the curriculum and guidelines for the Girls Make Apps Workshop, but they can be organized by anyone in any region. There is usually a point person coordinating the logistics with the site, computers, food (if needed), and internet access. MIT App Inventor 2 has printer-friendly tutorial guidelines to teach participants the basics of using App Inventor 2. You’ll need a facilitator for the day, running through the PPT, and explaining the concepts behind each lesson. This facilitator could be a graduate student, parent, teacher, professor, or anyone else who has been through the curriculum and tutorials and understands the concepts presented. If possible, ask graduate students and undergraduate students in the Computer Science department to volunteer at the Girls Make Apps Workshop and float around to help students, mentors and teachers troubleshoot as they learn App Inventor 2.

NOTE: Some schools choose to hack through tutorials by hosting several shorter or longer sessions. Have a format that worked well for your community? Let us know!

Girls Make Apps Workshop Sample Agenda

Time: 4 hours and 15 min

Objectives:

- Girls will learn the basics of using App Inventor 2 to build a mobile app.
- Girls will work in teams to create a mobile app idea
- Girls will present their app idea in teams.

Time	Agenda Item	Materials
10:00am 15 min	Welcome <ul style="list-style-type: none"> ● Technovation Overview ● Videos ● Objectives for today: tutorials and a paper prototype ● Point students to the #Technovation information if you plan to have a live twitter feed. 	Computer Speakers Technovation PPT slide 1-2 #Technovation Twitter feed if possible
10:15am 15 min	Technology set-up <ul style="list-style-type: none"> ● Distribute computers or have girls set up their computers with App Inventor following the instructions on Pg. 1-3 of the Talktome instructions ● Girls might need help setting up a Gmail address if they don't have one. ● Post up the Wi-Fi code if necessary ● Check to see if teams have an android device for testing or will be using the emulator. If they are using the emulator direct them to the set up instructions. 	<ul style="list-style-type: none"> ● Pg. 1-3 of Talktome set-up instructions ● Emulator set-up instructions ● Poster paper with the Wi-Fi code
10:30am 30 min	AI 2 Tutorial: Talktome <ul style="list-style-type: none"> ● Make sure the girls have all made it the homepage of App Inventor 2 (as seen on Pg. 4 of Talktome) ● Continue leading the girls through Pg. 5 to create the first button. ● Testing the button: Pg. 6-11 of Talktome ● Building the app: Pg. 12-18 of Talktome ● Final test: Pg. 19 ● Make sure the girls save their app by clicking the "project" menu and clicking save ● CONGRATULATE girls on building their first app! 	<ul style="list-style-type: none"> ● Pg. 4-19 of Talktome instructions
11:00am 30 min	AI2 Tutorial: Talktome Part 2 Shaking and User Input <ul style="list-style-type: none"> ● Make sure the girls are on the Pg. 2 of the Talktome Part 2 guide ● Create an Accelerometer Sensor and program a Shaking event using Pg. 2-5 (Make sure students COPY and PASTE the Purple Block) ● Test using Pg. 6 ● Create User Interface using Pg.7-9 ● Ask the girls to save their app 	Talktome Part 2 tutorial instructions
11:30am 20 min	AI2 Tutorial: Hello Purr <ul style="list-style-type: none"> ● Allow the girls to work more independently as a team to build this next tutorial ● There are not printed instructions so the girls will have to navigate to the App Inventor 2 HelloPurr instruction link. 	
11:50am 30 min	Lunch Break (if needed) *You can leave time to tinker while girls break.	

<p>12:30pm 20 min</p>	<p>AI2 Tutorial: BallBounce</p> <ul style="list-style-type: none"> ● Allow the girls to work more independently as a team to build this next tutorial ● Encourage the girls to stop and test as they build: Pg.10 ● The first part of building the app will take about 15-20 min. Encourage the girls to work on extending the app by changing the color of the ball, speed and scale of the ball, or creating targets for the ball to hit. 	<p>BallBounce tutorial instructions</p>
<p>12:50pm 20 min</p>	<p>AI2 Tutorial: DigitalDoodle</p> <ul style="list-style-type: none"> ● The girls will use the tutorial instructions to build their DigitalDoodle app. ● The last block "getCurrentY" doesn't have a picture of where it should be shown. The girls might receive warning messages. Encourage them to tinker and figure out where the last block should go. ● The first part of building the app will take about 10 min. Encourage the girls to work on extending the app by changing the color of ink, backgrounds, or draw dots instead of lines. 	<p>Digital Doodle tutorial instructions</p>
<p>1:10pm 50 min</p>	<p>Create your own app</p> <ul style="list-style-type: none"> ● Break the girls up into their teams. Ask if there is anyone without a team and have them pair up with each other. ● Have each team create their own app. This is just for fun, not for the final competition. Students simply practice the concepts they learned so far and create any kind of app they want. 	
<p>2:00pm 15 min</p>	<p>Create your own app share out</p> <ul style="list-style-type: none"> ● Prompt volunteers to share out about the experience creating their own app today. ● Put the slide up that shows the questions to answer in the share out: <ul style="list-style-type: none"> ○ What did you learn today? ○ Which skill did the team chose to build on in their own app? ○ What are you looking forward to doing with Technovation? 	
<p>2:15pm 25 min</p>	<p>Closing</p> <ul style="list-style-type: none"> ● Thank the participants for taking a chance and learning something new. ● Remind the girls to register as a team on the Technovation and start looking for a mentor. ● 15 min of extra time allotted here just in case you need it. 	

How to Plan a Girls Make Apps Workshop

1. **Find a space to host the event.** Ensure that the room has Wi-Fi (you will need a lot of bandwidth), A/V set-up with speakers and projector, and plenty of tables and chairs for everyone. You may need to print out guest accounts for each student (or pair of students) to access the Wi-Fi. Try reaching to these groups for space, volunteers, or donations: SWE (Society of Women Engineers), AWE (Association of Women Engineers), or any service groups within the engineering department. It also helps to have the support of a professor or lead who can help connect you to the right resources. Most academic departments have websites with contact information for all of their professors, by department, so try looking up some female professors or graduate students within the department. If you can't find a space to host the event, try a local technology company, a library, a local YMCA, Boys and Girls Club or a local school. Just be sure that your site will have adequate bandwidth (that can sometimes be a problem in smaller spaces).
2. **Find someone to teach the Girls Make Apps Workshop.** The instructor for the event can be any adult who has gone through the curriculum and completed each tutorial beforehand. It's not required that the instructor have an understanding of the basic computer science concepts covered in the curriculum but it will help if they do. S/he could be a professor (which would help in terms of getting space on campus), a graduate student, a teacher, or anyone else who has reviewed the curriculum and tutorials.
3. Ask a computer science department to help you **recruit undergraduate and graduate students to volunteer** for the day and help teach App Inventor 2. Students don't need to be familiar with App Inventor 2, but we recommend that they run through a few tutorials in advance of the Girls Make Apps Workshop to prepare for it.
4. **Advertise Girls Make Apps Workshop** to teachers, students, and mentors once the details have been finalized. You may want to send information about parking and transportation along with the invite.
5. Encourage attendees (including university students, teachers, mentors, students, etc.) have **reviewed App Inventor2 and** installed everything necessary on their laptops such as the emulator if they don't have an android phone.
6. **Arrange for lunch** to be delivered halfway through the event, or ask students to bring a bag lunch and water bottle. **OPTION:** Ask the CS department or a corporate sponsor to provide funding for the lunches. Alternatively, students can pack and bring lunches.
7. **Remind attendees to bring:**
 - Tutorials (PRINT one copy per student)— available through the Technovation course
 - Laptops
 - Android mobile device (if available)
 - USB cables for phones (if available)
 - Notebook and pencil for taking notes
 - Lunch and water bottle (unless lunch will be provided)
8. **Take photos** at the event and send them to Jenna@iridescentlearning.org or post them on our Facebook page. Ask students to share about their experiences on the Technovation forum, Twitter, or on the Technovation Facebook page with the #Technovation hash tag. If you have enough computers have a live Twitter feed and show the girls tweets using the #Technovation. You can give out a prize for the best tweet if you can to encourage the girls to share.
9. **Follow up** with a thank you note to the sponsoring university and/or company who helped coordinate the event.
10. **Post questions** on the Technovation Forums or reach out to schools near you if you have any questions about organizing a Girls Make Apps Workshop.



Girls Make Apps Workshop Checklist

What you need to run a workshop

- Facility with reliable Wi-Fi access
- One of the three live testing options for AI2: <http://appinventor.mit.edu/explore/ai2/setup.html>
- Enough seating and tables for students who are attending
- Presenter who can guide the girls through the presentation
- Access to computers for at least every 2-3 girls either at the facility or ask girls to bring their own.
- Lunch or snacks. Ask the girls to bring their own if needed.
- Projector if possible: this will help in walking the girls through the tutorials

Before the event

- Make sure there is Wi-Fi access
- Make posters with the Wi-Fi access code
- Confirm number of participants – create a sign in sheet or set up electronic check-in
- Print photo waivers and pens
- Ask a volunteer to take pictures
- Reach out to volunteers/female mentors to attend
- Send a reminder notice/email to registered students
- Gather materials: computers, sign in sheets, and copies of materials
- Create a #Technovation so students can tweet or post
- Set up the PPT with a projector
- Share your event on the Technovation Forum incase there are local girls you want to reach out to.

During the event

- Arrive before the event to set up the technology: computer, Wi-Fi, and PPT.
- Post the Wi-Fi access code and #Technovation twitter signs around the room.
- Set up a sign in table or electronic check-in process.
- Have a twitter live feed for the event so girls can see their posts.
- Ask volunteers to walk around and help students or pick a table in the room to work with.

After the event

- Send a thank you email to participants and volunteers.
- Encourage teams to register using the link for the Technovation team registration page at www.technovationchallenge.org
- Email your Technovation Regional Coordinator with the final attendance numbers, any pictures from the event, and feedback.