



# Think Like a Digital Designer: Unplugged

*TechGirlz is a 501(c)3 nonprofit that inspires middle school girls to explore the possibilities of technology to empower their future careers.*

## TECHSHOP OVERVIEW

### BRIEF WORKSHOP DESCRIPTION:

- TechShop Description (use for marketing): Students will learn how researchers, designers and developers use design thinking to create digital experiences like the ones in their favorite apps! Guided, unplugged activities will show students how to put themselves in the mind of users that may not be the same as them and brainstorm ideas for improving the user experience of real apps.
- Instructor's Level of Expertise: Basic - Instructors should be very familiar with the various roles researchers, designers and developers play in User Experience. They should be able to demonstrate ideas like wireframing/ UI sketching and have experience with UX personas.
- Approximate Time Range of Workshop: 3 hours

### SPECIFIC LEARNING GOAL(S)/OBJECTIVE(S):

By the end of this workshop, students will be able to:

- give examples of good user experiences and be able to provide the rationale
- explain the various roles that comprise the UX field
- have empathy for people who have different expectations, needs, and challenges other than their own.

### ASSESSMENT:

- Students will have achieved/understood the specific learning goal if they can use industry terminology to talk about digital experiences and create application features for different types of users.

## RESOURCES/MATERIALS:

- Software: [presentation slides](#)
- Hardware: projector, screen, computer for instructor to present slideshow from
- Other: Internet connection (instructor only), [wireframe template](#) or other [sketch paper](#), [persona cards](#), name tags, swag, whiteboard markers, sticky notes, paper, pencils/pens, copies of TechShop Attendee Survey (\*online: <http://techgirlz.org/survey> or [printed](#)) \*Online survey preferred. Students will receive a certificate of completion ONLY by filling out the online survey.
  - Students can complete the online survey on their phones, if they have them present.
- Workshop Registration Page: We can help you with registration and promotion via our website and social media. Simply complete [this form](#): <http://techgirlz.org/promote-my-workshop> when details are finalized.

## WORKSHOP PREPARATION:

- Print [persona cards](#) or create your own.
  - Make two sets of cards: one set will show different user personas, the other set will show different types of applications
- Print student copies of the [wireframe template](#) or other [sketch paper](#)
  - Also, be sure to have plain paper on hand in case students would prefer to use that for their sketches
- Ensure the room is arranged to your preference
- Ensure the Internet is working
- Have a backup plan in case there are technical issues

## TECHSHOP

### AS THE STUDENTS ARRIVE: (~5 min)

1. Enthusiastically greet students; shake their hands and make eye contact.
2. As students arrive, give them a warm-up activity, ask what they know about the workshop topic, or have them share their most used/ favorite application. Have them share with a partner as an icebreaker.

### INTRODUCTION: (~20 min)

1. Introduce yourself and the TAs (i.e. What is your story? How did you get interested in tech and choose your job?). Share stories, both your own and those of friends and accessible role-models throughout the workshop. The event space (tech company, university, etc.) may also be a learning experience for the students as well. If so, have the site representative explain why and give a tour if appropriate. (slide 2)

2. If applicable, provide students the opportunity to get to know one another using a quick icebreaker/get-to-know-you game (e.g. pair up and share) or simple introduction by name (e.g. your name, why you're here, favorite activities or websites...). (slide 3)
3. Next, share/show what students are going to learn today and ask/explain WHY this is a valuable skill. Share the workshop general outline so students know what to expect. Try to evoke a sense of curiosity. (slide 4: What's on the Agenda?)
4. Review any rules and expectations (e.g. raise hand, restroom policy, [internet safety](#)). (slide 5: A Few Things Before We Get Started)

## **WORKSHOP: (~120 min) (this should include a few mini workshops leading to a bigger project)**

*Note: workshops can and should be modified for the instructor's style and the students' skill level and interests.*

Let's jump in! Refer to the [slideshow](#) notes for a "script," which is only a suggestion for how you might want to cover each topic in the workshop.

### **PART 1: What is User Experience? (30 mins)**

1. Introduce the concept of User Experience (what it means, examples, etc) (slides 6-7: How Do Designers Do It?/What is User Experience?)
2. Have a discussion about what apps the students currently use. (slide 8: You Tell Us)
3. Love Letter Activity: Since you started out talking about the apps you love, it's time to think about why you love them so much (and maybe even the reasons why you're starting to fall out of love with them). (slides 9-10: Tell Us How You Feel/It's Time!)
  - a. Students will write a "love letter" to their favorite app to gather their thoughts about their experiences with applications.
  - b. Students will read their letters aloud and instructors will start writing key themes or features or even emotions on sticky notes or a whiteboard.
  - c. Once everyone has read their letters, the group will brainstorm together about common themes and arrange the sticky notes in groupings on a wall or whiteboard. We will come back to these later on in the workshop!
4. Review what was learned about digital experience, good user experiences and designing for others. (slide 11)
5. Take a break! (slide 12)

### **PART 2: How Do We Create a User Experience? (45 mins)**

6. Introduce concept of wireframes and design. (slides 13-15: How Do We Create a User Experience?/Lay the Groundwork)
7. Sketch Activity: For this next activity, you are going to have to think about what that person might need from a user experience, and how you can design an app to meet those needs. Note: This can be done individually or with a partner, depending on the size of the class and time needed for presenting. (slides 16-17: Put Yourself in Someone Else's Shoes/Let's Sketch)

- a. Distribute printed [wireframe template](#) or other [sketch paper](#) or have students use a plain piece of paper.
  - b. Next, have each student pick one user card and one app type from the [persona cards](#). The task is to sketch as many ideas they can in 5 minutes for that unique user/app combination. Nothing is off limits and there are no bad ideas. Use the words and themes from the love letter activity to keep the focus on good user experiences.
    - i. **Instructor Tip:** Use a timer to stay on track for timing of each activity.
  - c. Once the 5 minutes is up, switch user cards with someone else and do 5 minutes worth of sketching for that user. The idea is to have ideas for one type of app for three different types of users. (For example, a student might create a music sharing app for a grandma, a chef, and a dog)
    - i. Depending on the timing of the workshop, students can switch the character cards one more time so they have a total of three people to design for.
  - d. **Instructor Tip:** If time allows, give a longer opportunity for students to work on their sketches. This is a consistent ask when doing this activity.
8. Presentations: Have each student present their favorite ideas and talk about the challenges they found designing for so many unique users. (**slide 18: Pencils Down**)
  9. Review best practices for organizing ideas for client sketches. (**slide 19**)

### **PART 3: How Do We Build a User Experience? (30 mins)**

10. Talk about how development fits into all of this. (**slides 20-21: How Do We Build a User Experience?/ Hold On, Where are the Developers?**)
11. Collaboration is a big piece of the puzzle! (**slide 22: STOP, Collaborate & Listen**)
  - a. It is important for designers to think critically and functionally about designs.
  - b. Creating an aesthetically pleasing static design is only half the battle.
  - c. In order for a design to become fully realized, all details and nuances must be accounted for.
12. How to Make a Sandwich Activity: This activity is to help portray how important small details are to make something (or somebody, like the developer) do exactly what you want it to do. (**slide 23: Let's Eat!**)
  - a. Think about how you would tell someone to make a PB&J sandwich.
  - b. Write down instructions to help us make the sandwich.
    - i. **Instructor Tip:** In case of allergies, you can sub out PB&J for any type of sandwich or how to activity. Bringing the actual ingredients or materials is a great way to really drive the understanding for the lesson and a fun activity for volunteers or students to act out.
13. Review how communication is key, attention to details/backup plans are important and teamwork makes the dream work. (**slide 24**)

### **PART 4: What's Next? (30 mins)**

14. Discuss parts students liked and what they didn't like about being user experience designers for the day. (**slide 25: What's Next?**)
15. Talk about next steps to follow if you are interested in pursuing a career in UX Designing. (**slide 26: Keep the Momentum Going**)

## OPTIONAL EXTENSION ACTIVITIES: (for students who finish early or need a greater challenge )

- Doodle Bird Sketch Warm-up (could be done before the Sketch Activity in Part 2): In this part of the workshop, we want to loosen our hands and get ready to draw. Have students draw a bunch of scribbles on a plain sheet of paper or whiteboard. Then find a way to make each scribble into a bird. This is just a silly way to warm up and let loose before we start our main sketching activity. Feel free to substitute this drawing warm up with another. Whatever you decide, the goal is to get rid of paper-shyness (aka the feeling of being afraid to put pencil to paper because you don't have great drawing skills or you want your first doodle to look like the mona lisa.)
- Encourage students to learn more on their own either in the workshop or at home.

## CLOSING: (~20 min)

1. At the end, encourage students to share their project with other participants (and, if applicable, families). This can be done 1-on-1 with a partner or with the whole group depending on interest.
2. Ask the students to complete the TechShop Attendee Survey (\***online:** <http://techgirlz.org/survey> or **printed**)  
*\*Online survey preferred. Students will receive a certificate of completion ONLY by filling out the online survey.* Allow them an opportunity to share feedback on their experience (e.g. what they learned, successes, questions, challenges, and other reflections). Students may want to share their next learning goals and interests. (slide 27: Thank You!)
  - a. This is an unplugged workshop, but if students have their smartphones they can complete the online survey using them.
3. Give students (and parents) ideas to extend and continue their learning after the workshop (e.g. sites to learn on their own; upcoming, local tech events; tech classes). Consider preparing a handout with this information. (slide 28: Resources)
4. Say your goodbyes and encourage students to continue to learn about technology at home.

## INSTRUCTOR FOLLOW-UP:

- **Send us your numbers!** Tell us if you used our workshop and how many students participated.
  - Send us an email with this information to [info@techgirlz.org](mailto:info@techgirlz.org) OR complete the survey below.
- **Help us improve!** Please share any feedback about your workshop.
  - We appreciate your time and feedback--it will help us build upon successes and improve future workshops. Please complete this quick survey: [techgirlz.org/instructor-survey/](http://techgirlz.org/instructor-survey/)

## ADDITIONAL RESOURCES: (useful slides, images, videos, and sites)

- Video examples on how to follow PB&J directions exactly how they are written by the students!  
<https://youtu.be/RjHzD2sfWcQ>, [https://youtu.be/9-RSApsc\\_fQ](https://youtu.be/9-RSApsc_fQ)
- [Love Letter Activity Concept](#): If you've never done this activity before, read up on its intent and best practices. This site also has other great activities to help with design thinking/empathy
- [Teaching Tips \(TechGirly\)](#) advice for instructors to be good teachers and role models
- [Role Model Tip Sheet \(TechGirly\)](#) detailed questions to help you share your story and inspire girls in tech
- [Internet Safety Tips \(TechGirly\)](#) advice on how to use the Internet safely and protect yourself and your info
- [Ice Breaker or Beginning Activity Ideas](#) resources for Computer Science based activities to add to your lesson