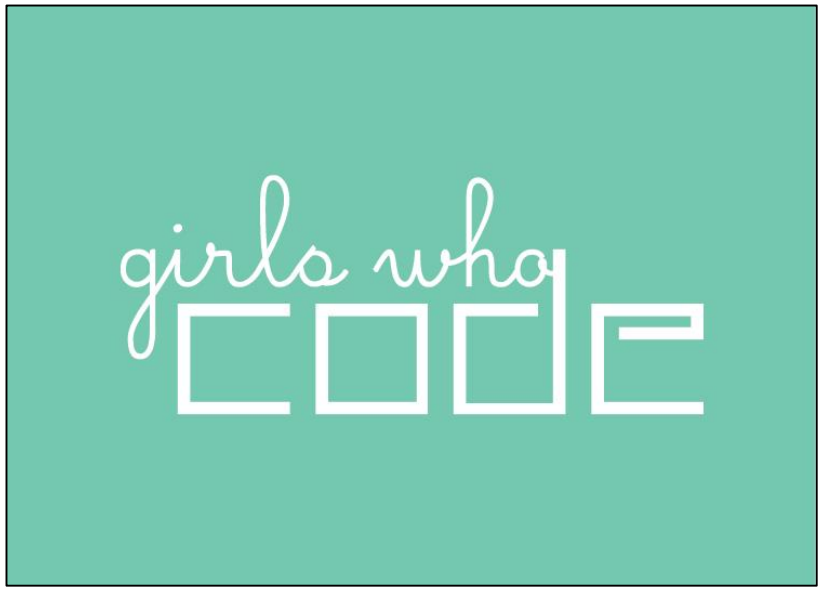
girls who code

Launching a GWC Club at Your Library

September 11, 2018

Today's Presenters

Hannah Simon Goldman
hannah.simongoldman@girlswhocode.com
Regional Partnership Coordinator, Girls Who Code



Shantel Richardson (srichardson@jesspublib.org)
STEM Education Specialist, Jessamine County Public Library

girls who code

Clubs Overview for KY Libraries

Sept. 11, 2018

AGENDA

- **Quick overview of Girls Who Code**
- **Introduction to Clubs**
  - 6-12th Grade Clubs
  - 3-5th Grade Clubs
  - Our Impact
- **Launch a Club through our partnership!**
  - What You Need
  - How We Support
  - Community Partnership Benefits
  - How to Join the Movement
- **Club Spotlight**
  - Jessamine County Public Library

girls who code

https://www.youtube.com/watch?v=zMLsgi2Vd2Q

THE PROBLEM

Computing skills are the most sought-after in the US job market, with demand growing **3X** the national average.

Yet research shows that **less than a quarter of computing jobs are held by women**, and that number continues to decline!

We can't leave behind the **ideas and innovations** of half the population, nor can we shut girls out of the economic opportunity represented by the tech sector—on average, **tech jobs pay over $100K/year!**

We need to make a change!

girls who code

OUR MISSION

Girls Who Code works to **inspire, educate, and equip girls** with the computing skills needed to pursue 21st century opportunities.

Our vision is to reach **gender parity** in computing and technology sectors.

We seek to reverse the decline by providing **free and flexible computer science programs** for elementary, middle, and high school students.

girls who code

GIRLS WHO CODE CLUBS

Clubs are FREE after-school programs for 3-12th grade girls to **join our sisterhood** of supportive peers and role models and **use computer science to change the world**.

Clubs are led by **Facilitators**, who can be librarians, teachers, parents, or volunteers from any background or field. **Many Facilitators have no computer science experience** and learn to code alongside their Club members.

We offer two Club programs for you to choose from:

3rd-5th Grade Clubs

6th-12th Grade Clubs

6-12TH GRADE CLUBS

6-12th grade Clubs are FREE after-school programs for girls to learn how to impact the community through code and join a supportive sisterhood.

- ➔ Featuring a **Girls Who Code Project** where girls solve real world problems they care about through code
- ➔ Access to **Girls Who Code HQ**, which includes 120+ hours of curriculum and a variety of coding languages to choose from
- ➔ **~1-2 hours per week** after-school
- ➔ **10-15+ meetings**

girls who code

6-12TH GRADE CLUBS MODEL

After-school Clubs for **6th - 12th grade girls** focus on the following three components:

SISTERHOOD

Club girls join a **safe and supportive environment** of peers & role models and learn to see themselves as computer scientists.

Beyond the Club, girls can tap into an **alumni network** of tens of thousands of girls across the country who are using computer science to solve problems they care about.

CODE

Club girls learn the concepts of loops, variables, conditionals, and functions that form the basis for all **programming languages** - whether they want to build a website, an app, or a robot.

Returning Clubs girls can deepen their programming knowledge through more advanced tutorials.

IMPACT

Club girls work in teams to design and build a Girls Who Code Project that **solves real world problems** they care about through code.

girls who code

6-12TH GRADE GIRLS WHO CODE PROJECTS

WATER WELL

“Track and reduce your water usage”

PILLAR

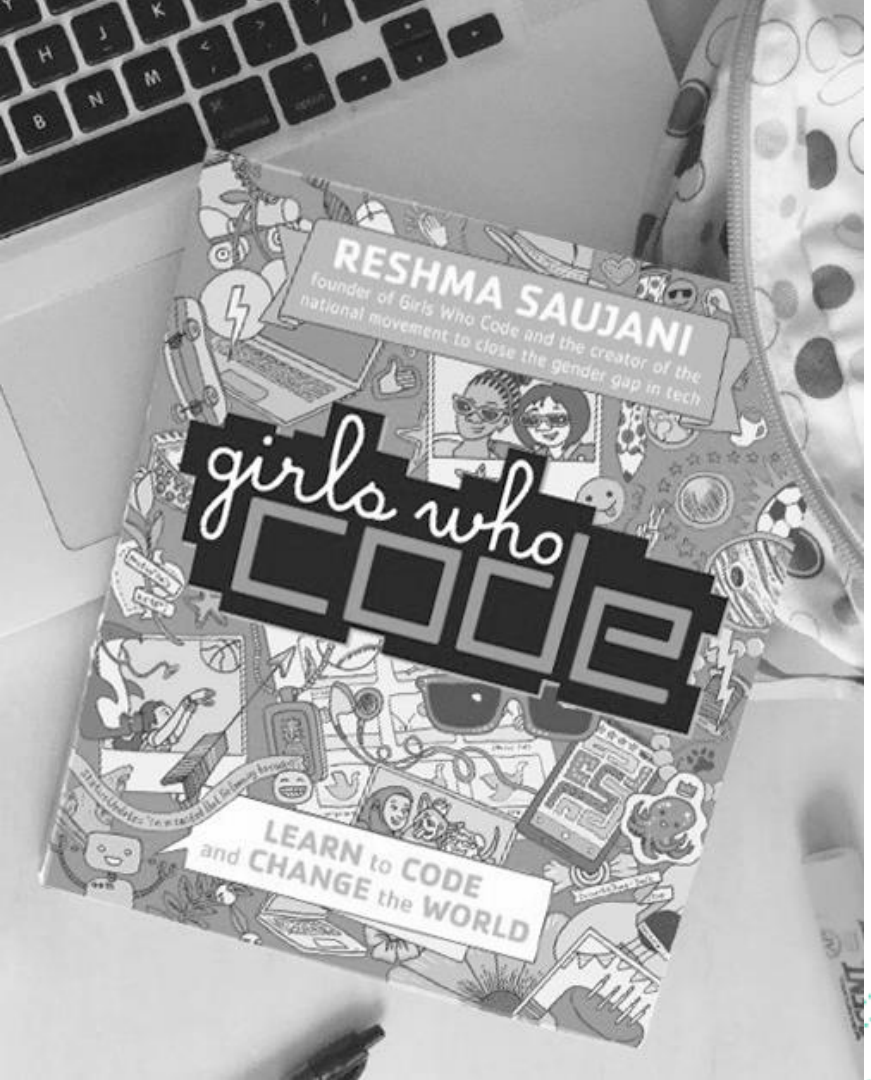
"100% anonymous community to share problems and get support and advice"

what is pillar?

- 100% anonymous!
- Post your problems, big and small
- Ask questions and be heard
- Get personalized advice from real people
- Pay it forward by helping others

*For more Girls Who Code Projects, check out our online **Project Gallery**!*

girls who code



3-5TH GRADE CLUBS

3rd-5th grade Clubs are FREE after-school programs for upper elementary students to design, code, read and explore together!

- ➔ Feature our best-selling non-fiction book, ***Learn to Code and Change the World***
- ➔ **~30-60 minutes per meeting** during lunch, enrichment blocks, or after-school
- ➔ **5-10 meetings** per school year

girls who code

3-5TH GRADE CLUBS MODEL

After-school Clubs for **3rd - 5th grade girls** focus on the following three components:

GIRLS WHO CODE BOOKS

Each meeting begins with girls reading together from a part of the non-fiction book, ***Girls Who Code: Learn to Code and Change the World***, followed by discussion and a creative challenge that can be done **on a computer or entirely offline**.

BRAVERY & RESILIENCE

Teaching girls to be brave and resilient early in their lives has the potential for **enormous impact on how they approach challenges**—and whether they stick with coding in the years to come.

COMPUTER SCIENCE

3rd–5th Grade Clubs introduce computer science to girls in a **fun and creative way**, at the exact moment when their interest is high.

girls who code

GIRLS WHO CODE IMPACT

90,000 GIRLS

Served To Date!

Our **5,000 college-aged alumni** are choosing to major in CS, or related fields, at a rate **15 times the national average**.

Our outreach to historically underrepresented groups - particularly girls who are Black, Latinx, or from low-income households - is paying off too. Our Black and Latinx alumni are choosing to major in CS or related fields at a rate **16 times the national average**.

*Learn more about our outcomes in our **2017 Annual Report**.*

WHAT YOU NEED TO GET STARTED

It is easy as 1-2-3 to get started! Before you apply to start a 3-5th Grade or 6-12th Grade Club in your community, you'll need need:

1

Space in a non-profit location to host your club at least once a week

2

Computers and internet connection
(6-12th Grade Clubs only)

OR

Copies of our non-fiction books
(3-5th Grade Clubs only)

3

A Facilitator who is over 18+ and will be responsible for administration and leading the Club curriculum.

NO technical experience is needed!

girls who CODE

HOW WE SUPPORT YOU

Girls Who Code provides **FREE materials and curriculum** to the Club Facilitator in order to support you with:

- **CS Skills** — Custom online training, online curriculum platform HQ, curriculum materials, and extended computer science resources
- **Community** — Clubs Success Specialist, online community with thousands of other Girls Who Code Facilitators, and in-person and virtual events
- **Logistics Support** — Recruitment Toolkits, Clubs Fund, and earlier access to resources

OUR COMMUNITY PARTNERS

Our organization relies on **collaboration with Community Partners** to drive our work and reach even more girls in your community. We seek to create partnerships with state and local leaders, school districts, community organizations, library networks and colleges/universities to **launch multiple Girls Who Code Clubs**.

Some of our other nearby Community Partners include, but are not limited to, the following:

Kentucky Department of Education – Our Children, Our Commonwealth

SWON

Northwest Regional Library System

JCPS

Northeast Ohio Regional Library System

NEOSTEMECO – Northeast Ohio STEM Ecosystem

KYOSA – Kentucky Out-of-School Alliance

girls who code

PARTNERSHIP BENEFITS

- ➔ **A designated Community Partner Manager** to provide regular communication, Club updates, and outreach support
- ➔ **A designated Clubs Success Specialist** for all affiliated Clubs
- ➔ **Access to the Community Partner Fund:** grants to support Clubs across a partnership
- ➔ **Priority access to engagement opportunities** like field trips
- ➔ **Community Partner Outreach Toolkit** provides flyers, template emails, media links, and more!

LAUNCH A CLUB THROUGH OUR PARTNERSHIP

Are you ready to join the movement?

Apply today to start your Club at **girlswhocode.com/clubsapply** !

When you reach **Page 4** titled **About Your Club** on the Clubs Application, please list our Community Partnership as your partner affiliation.

Libraries who have already joined the movement!

- **Clark County Public Library**
- **Corbin Lay Public Library (3-5)**
- **Corbin Lay Public Library (6-12)**
- **Fleming County Public Library**
- **Henderson County Public Library**
- ***Jessamine County Public Library***
- **Johnson County Public Library**
- **Madison County Public Library (3-5)**
- **Madison County Public Library (6-12)**
- **Trimble County Public Library (3-5: TCPL Applets)**
- **Trimble County Public Library (6-12: TCPL Holler Hacker)**

Club Spotlight: Jessamine County Public Library

STEM Education Specialist Shantel Richardson

Hear from an expert! Rockstar facilitator Shantel Richardson will tell you about her experience hosting a Club.

GIRLS WHO CODE

JESSAMINE COUNTY PUBLIC LIBRARY, NICHOLASVILLE, KY

SHANTEL RICHARDSON: STEM EDUCATION SPECIALIST

GIRLS WHO CODE

- JCPL was approved to begin GWC in December 2017, so we took the rest of December and all of January to promote GWC.
- We promoted JCPL's GWC in our newsletters and with the school board's newsletters for all of the local middle, high, and tech schools.
- We implemented the 10-sessions running February through May 2018.

GIRLS WHO CODE: SPRING 2018: 10 SESSIONS

- February 1, 8, and 22
- March 1 and 29
- April 12 and 26
- May 3, 17, and 31

JCPL

JESSAMINE COUNTY
PUBLIC LIBRARY
600 South Main Street
Nicholasville, KY 40356
(859) 885-3523

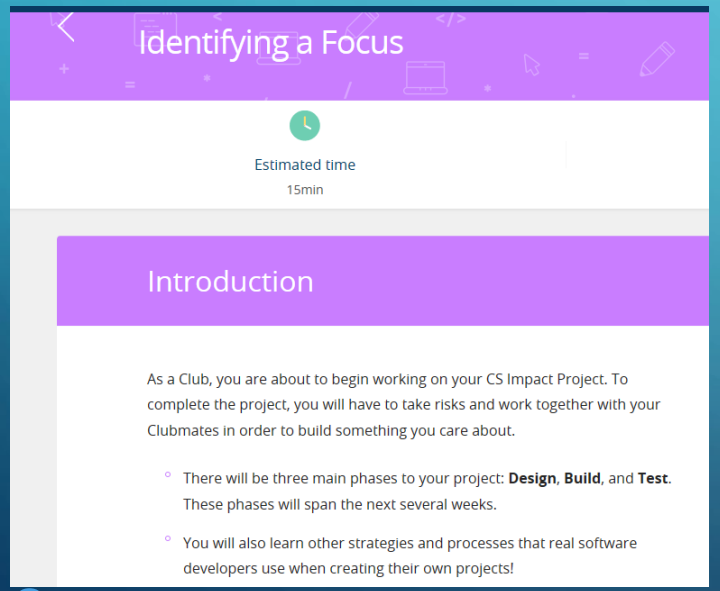
www.jesspublib.org

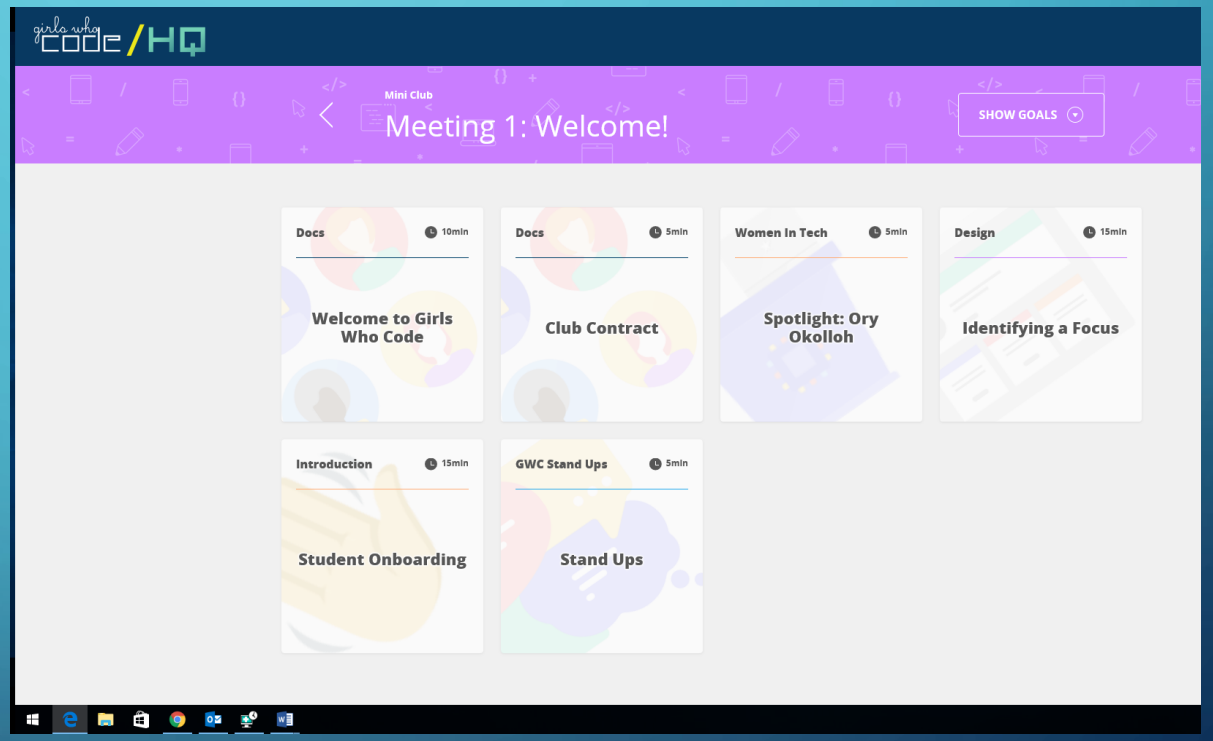
GIRLS WHO CODE: 15 SESSIONS

- For the 2018-2019 season we will meet on Thursdays and Mondays: September 6-May 23
- **6:30-8pm:** Girls registered and attended JCPL's GWC traveling from Nicholasville, Lexington, and other surrounding areas:
- 6th-12th grade

GIRLS WHO CODE : WELCOME

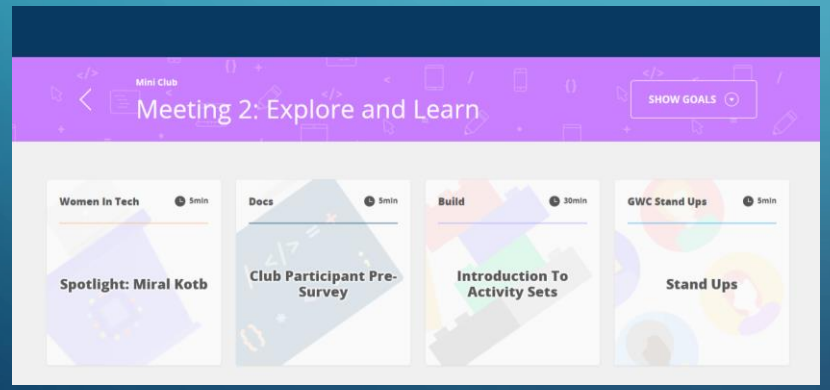
- February 1, 2018
- We also did a connection icebreaker game

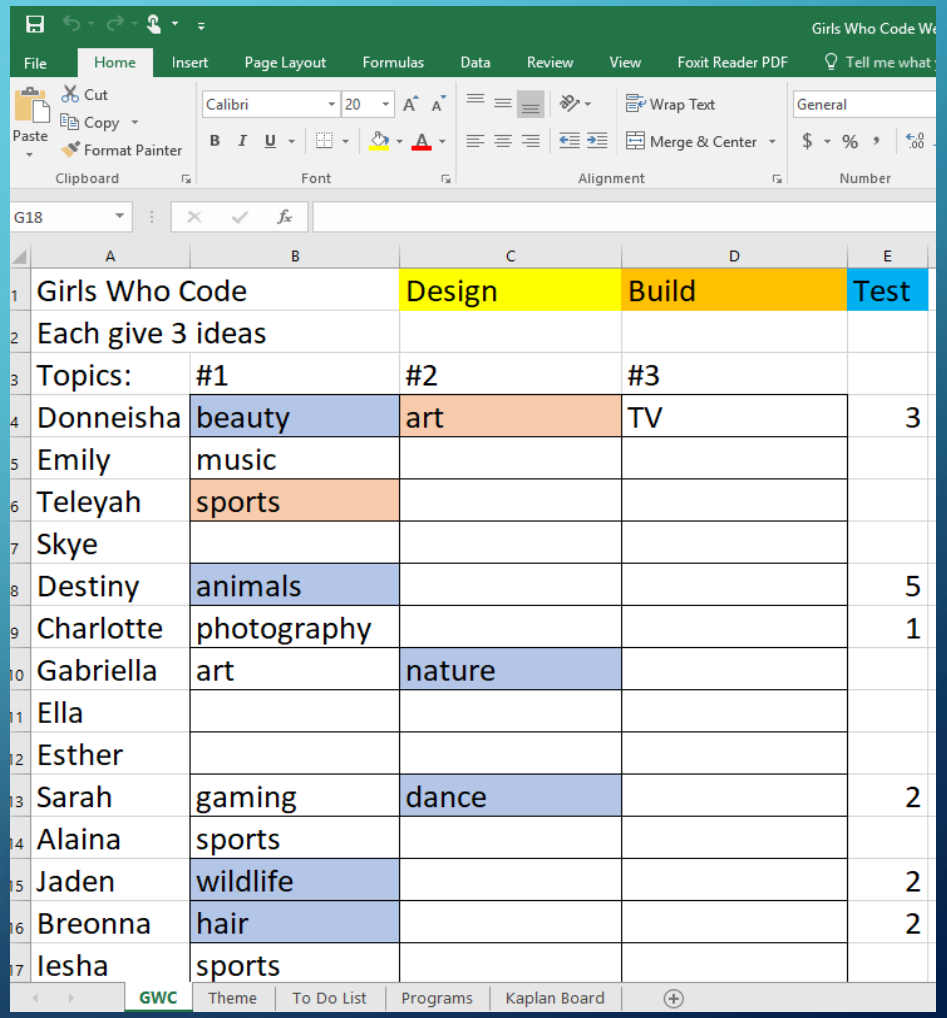




GIRLS WHO CODE : EXPLORE AND LEARN

- February 8, 2018
- Students explored Scratch, Khan Academy, Codesters, Ear Sketch, Quorum, and Thunkable
- Made an excel spreadsheet to nominate CS Impact Project ideas

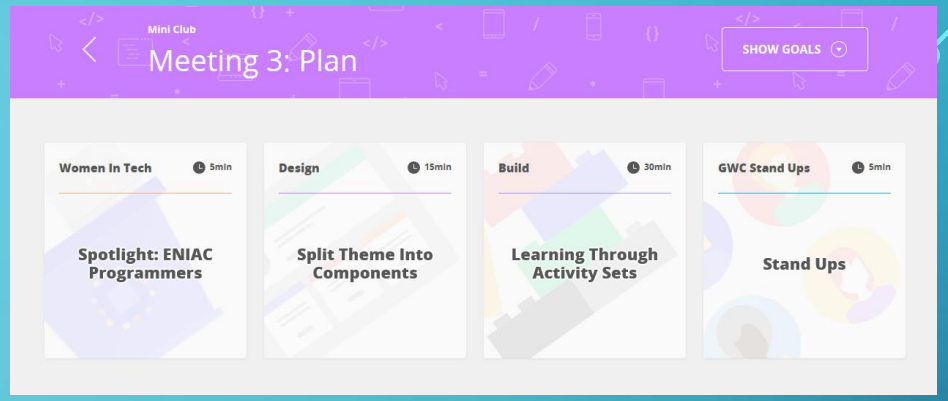




	A	B	C	D	E
1	Girls Who Code		Design	Build	Test
2	Each give 3 ideas				
3	Topics:	#1	#2	#3	
4	Donneisha	beauty	art	TV	3
5	Emily	music			
6	Teleyah	sports			
7	Skye				
8	Destiny	animals			5
9	Charlotte	photography			1
10	Gabriella	art	nature		
11	Ella				
12	Esther				
13	Sarah	gaming	dance		2
14	Alaina	sports			
15	Jaden	wildlife			2
16	Breonna	hair			2
17	Iesha	sports			

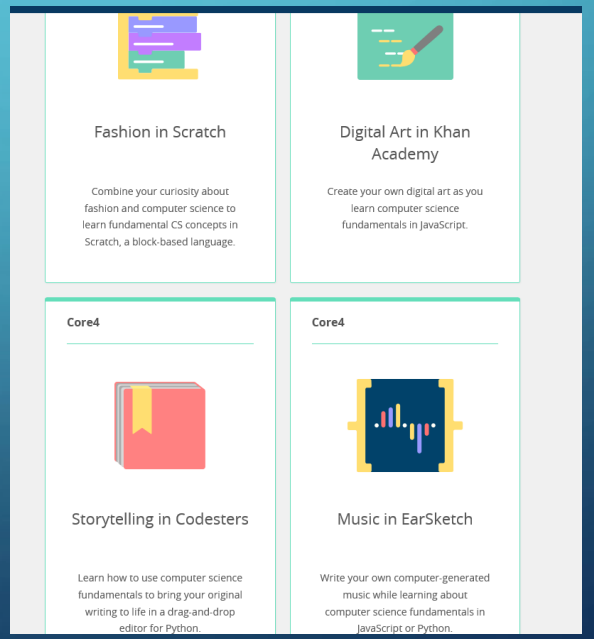
GIRLS WHO CODE: PLAN

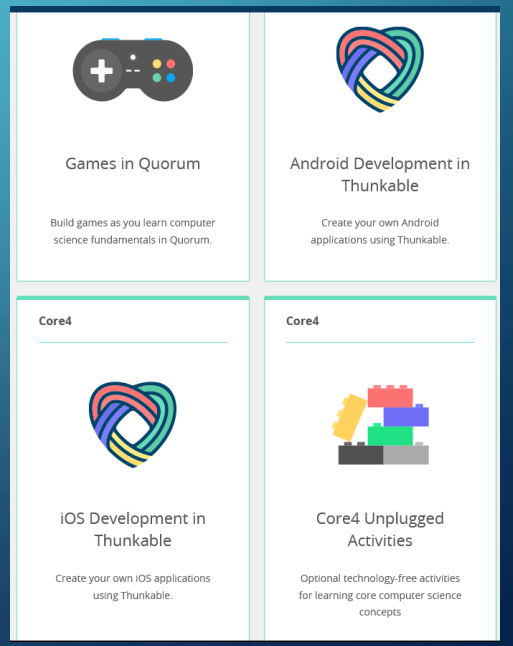
- February 22, 2018
- After voting on the CS Impact Project, the girls brainstormed ways that we can implement using games, animations, or education and listed popular ones they liked.



Girls Who Code	Design	Build	Test
Theme	CS Impact Project		nature/wildlife/animals
Games	Stories/Animations		Education/Tutorials
minecraft	jurassic park	Type	list of endangered species
pet saga	we bought a zoo	Topic	ways to help with wildlife and the ocean
angry birds	jumangi	Usage	ways to care for a pet
talking tom	beethoven		animal facts
	air bud		maps of nature trials in Nicholasville area
shelter animals	hotel for dogs		places to adopt pets
survival	all dogs go to heaven		good vets
safari	lady and the tramp		cars that are good for the environment
ocean	the fox and the hound		reasons to adopt shelter dogs/animals
volcanoes	the lion king		how to take care of injured pets
weather	bambi		skills that different animals have
jungle	the jungle book		behavior of animals
	tarzan		
	101 dalmations		
	dog gone		
	marley and me		
	a dog's house		
	dr. doolittle		
	cat vs. dogs		
	a dog's purpose		

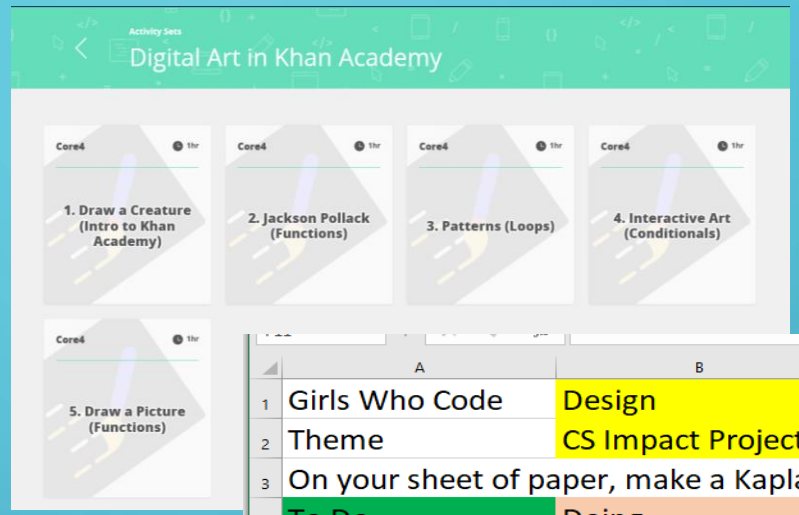
GWC | Theme | To Do List | Programs | Kaplan Board

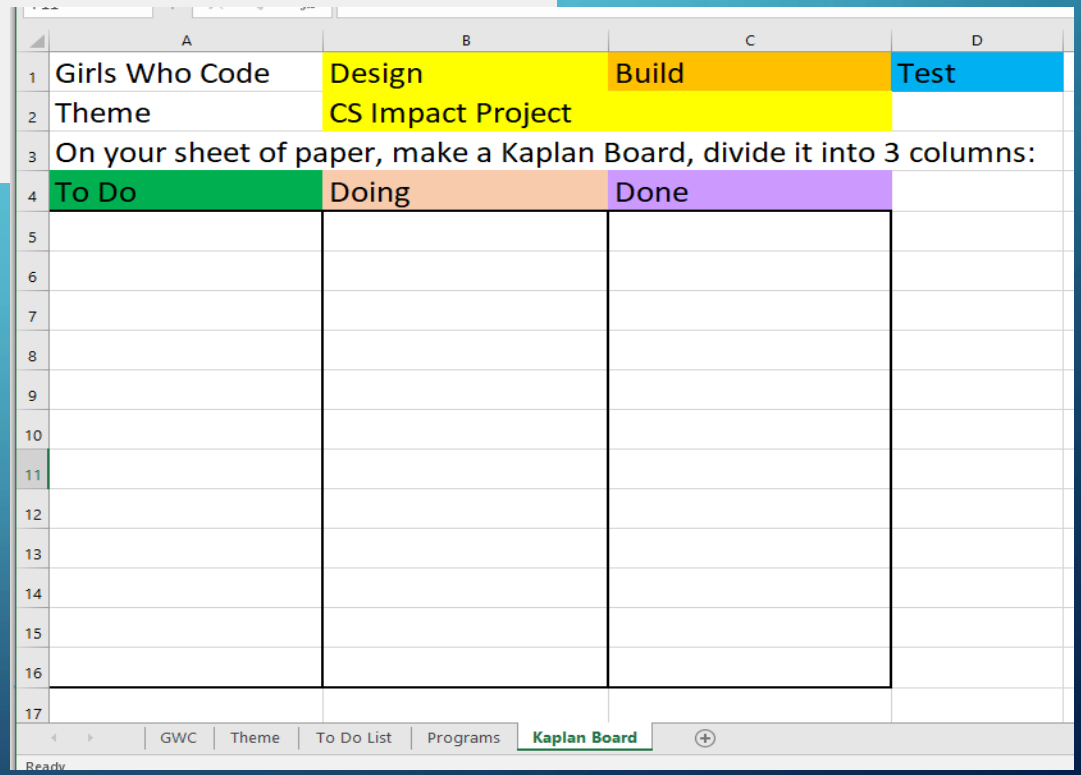




GIRLS WHO CODE: WIRE FRAMING: WEEK 4

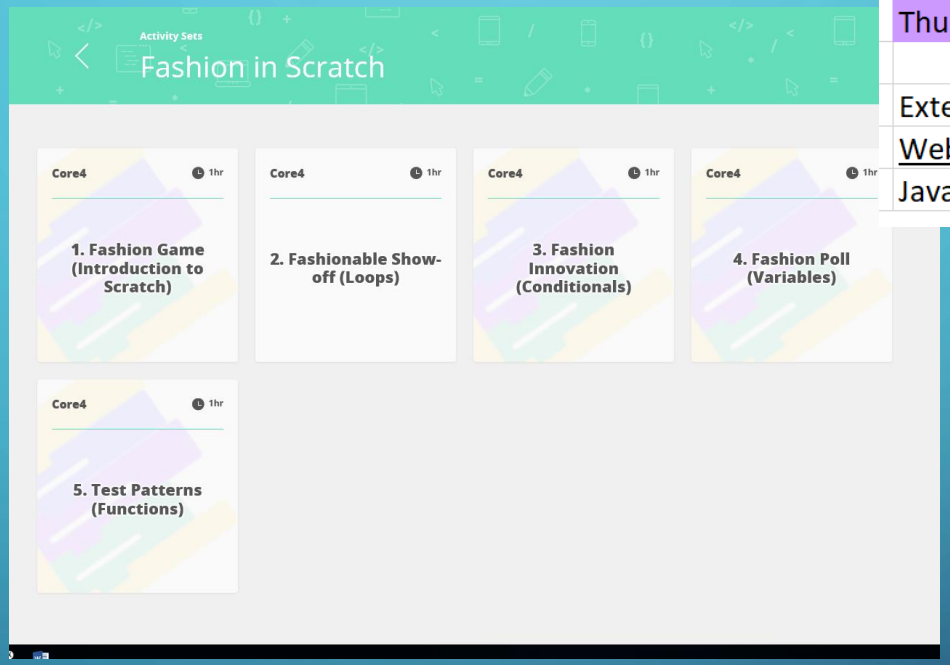
- March 1: Getting new members caught up going back through Week 1-3
- Light snack (juice, animal crackers, cheese and cracker tray)
- Girls worked in groups based on which software they chose and begin making their to do list: Scratch, Khan Academy, Codesters, Ear Sketch, Quorum, and Thunkable





GIRLS WHO CODE: BUILDING MEETING 4 AND 5

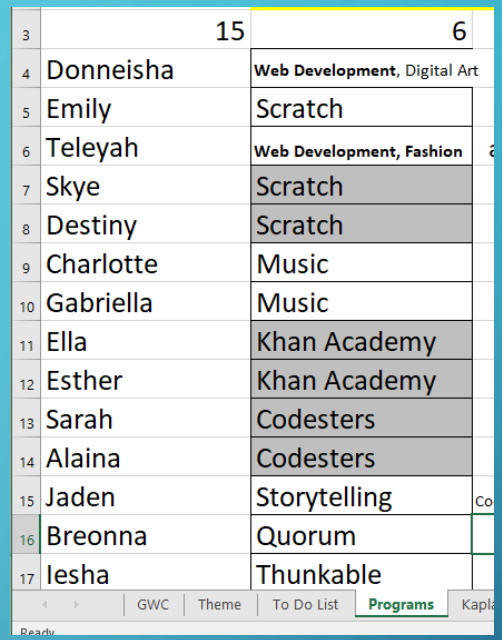
- March 29 and April 12 began with a spotlight video, then the girls dedicated 90 minutes to their projects each session.



nature/wildlife/animals			
Coding:			
Scratch	Fashion	5 hours	
Khan Academy	Digital Art	5 hours	
Codesters	Storytelling	6 hours	
Ear Sketch	Music	6 hours	
Quorum	Games	5.5 hours	
Thunkable	Android Development	7 hours	
Thunkable	IOS Development	7 hours	
Extended activity:			
Web Development			
Java Script, HTML, CSS		4.5 hours	or 35 hours

GIRLS WHO CODE: ROUND-ROBIN TESTING MEETING 7

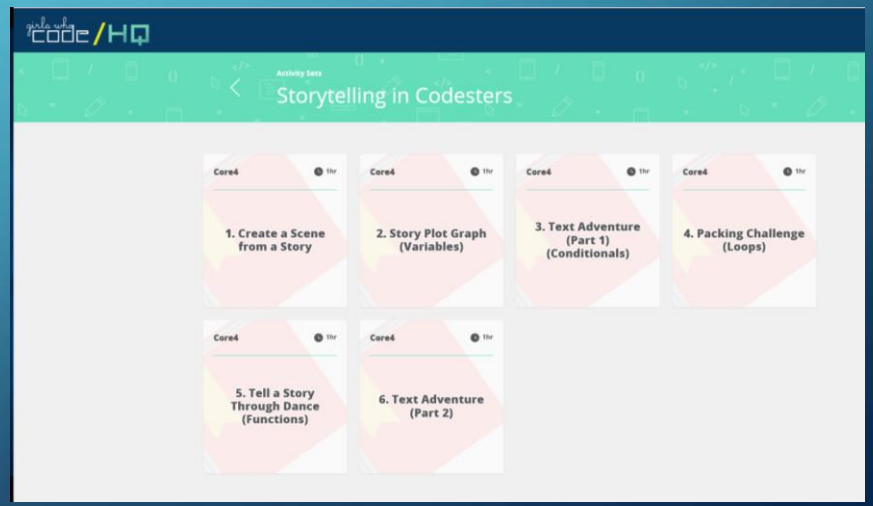
- April 26, 2018 Students did round-robin testing on each project and gave each other feedback for any impressive techniques and/or snags.
- Light snack (juice, popcorn, fruit tray)



3	15	6
4	Donneisha	**Web Development**, Digital Art
5	Emily	Scratch
6	Teleyah	**Web Development, Fashion**
7	Skye	Scratch
8	Destiny	Scratch
9	Charlotte	Music
10	Gabriella	Music
11	Ella	Khan Academy
12	Esther	Khan Academy
13	Sarah	Codesters
14	Alaina	Codesters
15	Jaden	Storytelling
16	Breonna	Quorum
17	Iesha	Thunkable

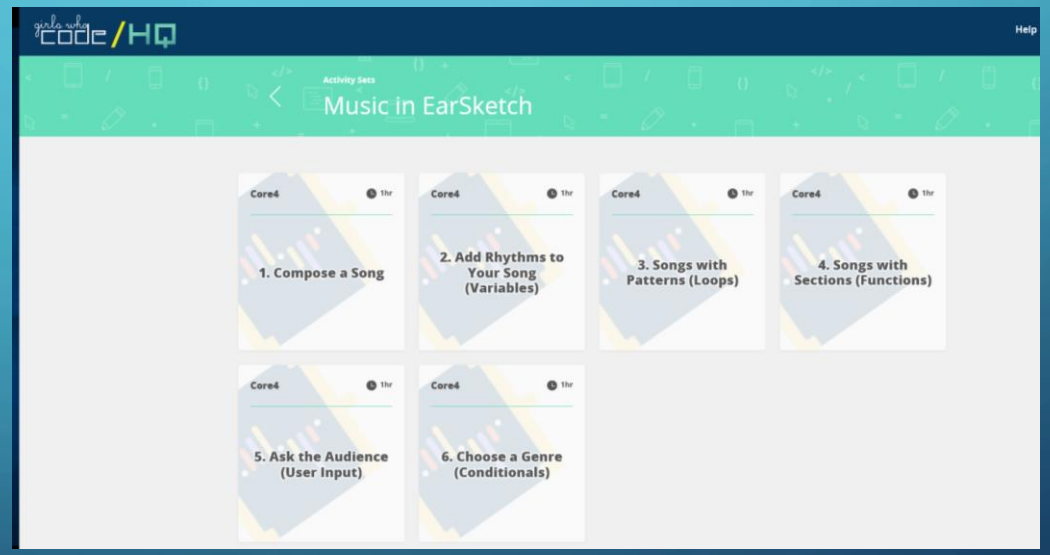
GWC | Theme | To Do List | Programs | Kapla

Ready

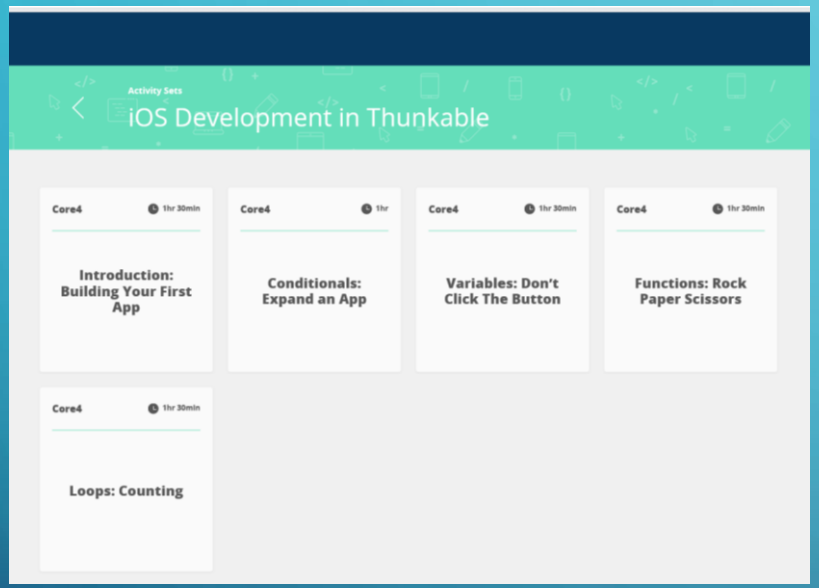


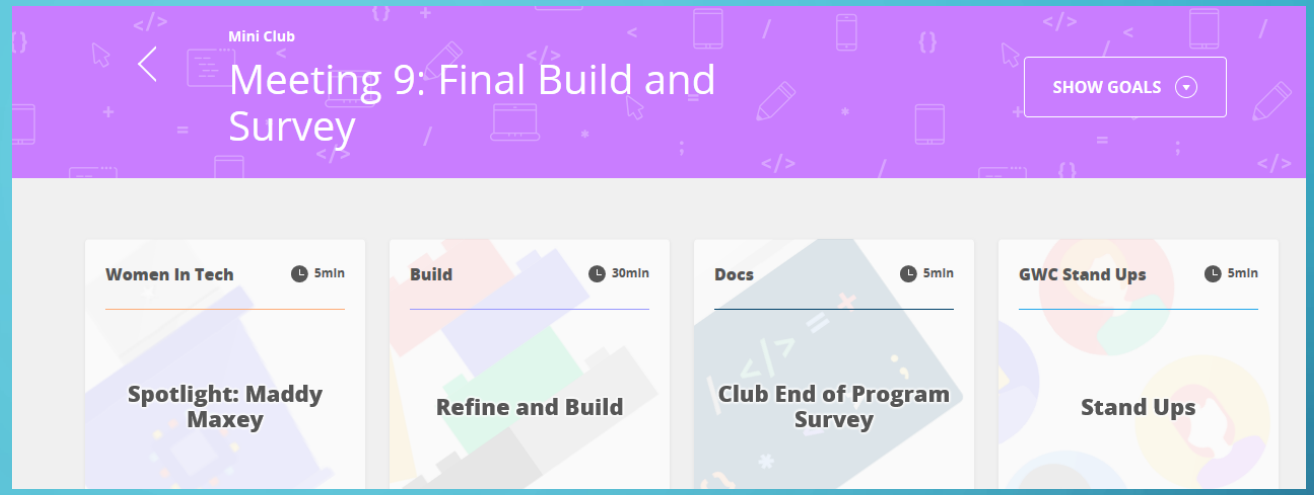
GIRLS WHO CODE: REFINE AND BUILD MEETING 8

- May 3, 2018 began with a spotlight video, then the girls dedicated 90 minutes to their projects.



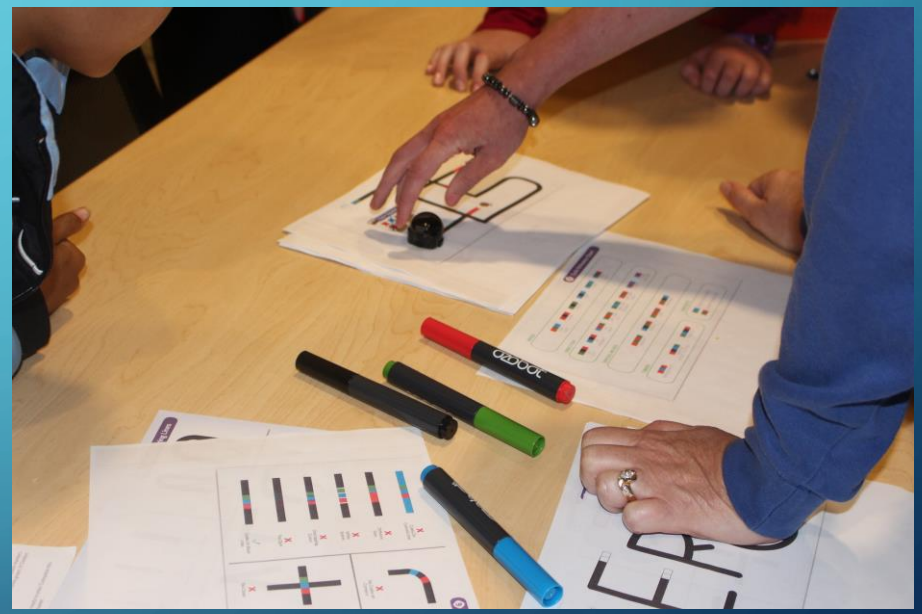
GIRLS WHO CODE: MAY 17, 2018





GIRLS WHO CODE: FINAL MEETING FOR SPRING: CELEBRATION

- May 31, 2018 Students and their parents, siblings attended the celebration.
- We enjoyed pizza, juice boxes, animal crackers, fruit tray, and cheese and cracker tray.
- Students were presented with a take-home coding gift that they can enjoy throughout the summer: Ozobots
- **I demonstrated with everyone how to use one and informed parents that returning members for the new season will be leaders for the group.**



Sign up for KDLA LISTSERVs®

- **KDLA-hosted LISTSERVs®**
- **https://kdla.ky.gov/librarians/staffdevelopment/Pages/listservs.aspx**
- **For Children's or Young Adult Program Staff**
  - KYAC is a monitored discussion list devoted to Kentucky's public librarians serving youth and children. By using this LISTSERV®, individuals from around the state will have the chance to share ideas, voice concerns, and make valuable contacts all through their e-mail.
  - TO SUBSCRIBE: To join the list, send email with the subject "KYAC" to Krista.King-Oaks@ky.gov or nikole.wolfe@ky.gov. In the body of the message, list your name and the name of your library. You will be emailed instructions for posting to this moderated discussion list.
- **For Library Technology Support Staff:**
  - KYTECH is a monitored discussion list devoted to those who work with technology for their library. By using this LISTSERV®, individuals from around the state will have the chance to ask questions, share ideas, voice concerns, and make valuable contacts all through their e-mail.
  - TO SUBSCRIBE: Send a blank message to: join-kytech@listserv.ky.gov or contact Lauren Abner at lauren.abner@ky.gov.

Lift Off!

For more information on the FREE youth services retreat, please visit: https://kdla.ky.gov/librarians/programs/Pages/Youth-Services-Retreat.aspx

Registration deadline is September 28th

https://kdla.wufoo.com/forms/r1l0esps1a7ttpz/

Lauren Abner
Technology Consultant
lauren.abner@ky.gov
(502) 564-1728

Please complete KDLA's survey: https://www.surveymonkey.com/r/GWCclub2018

KDLA's training is funded in part by the IMLS Grants to States program.