

## The ICT4me Curriculum

#### **About ICT4me**

ICT4me is an after school and summer curriculum for middle school youth to develop ICT fluency, interest in mathematics, and knowledge of information, communication, and technology (ICT) careers. This problem-based curriculum capitalizes on youth interest in design and communication technologies. ICT4me provides structured interactions with ICT professionals, including having youth participate in engineering design and development teams. ICT4me's promotes a train-the-trainer approach to building capacity in informal ICT learning.

#### **Build IT vs. ICT4me**

ICT4me is a derivative of the Build IT curriculum co-developed between SRI International and Girls Inc. of Alameda County. Questions about the Girls Inc. implementation of Build IT can be directed to them at <a href="http://www.girlsinc-alameda.org/about/contact">http://www.girlsinc-alameda.org/about/contact</a>.

SRI is no longer supporting the development of ICT4me, so the curriculum materials are offered as is.

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## **Electronic Versions of Materials**

Electronic versions of all materials in this unit are available for download from the website at <a href="http://ict4me.sri.com/">http://ict4me.sri.com/</a>.

## **Contact Information**

Please contact the SRI International Inquiry line for questions about ICT4me. <a href="https://www.sri.com/contact/form">https://www.sri.com/contact/form</a>



# ICT4me Unit 6 Scope and Sequence

## Joining a Design Team

#### Big Ideas

- Collaboration involves a strategy for dividing tasks associated with a solution into pieces that
  can be worked on individually and reassembling the work products into a cohesive whole to
  form the solution.
- Leadership involves teaching others new skills, communicating ideas to justify a position and convince others, and supporting a vision that may challenge the status quo.
- ICT Professionals: ICT professionals work with others to solve problems: colleagues and users.
- ICT Professionals: There are a variety of ICT careers. Some of these careers involve computer programming.
- Mathematics: A "mathematical disposition" toward problem solving requires analyzing given information, drawing on specific strategies, and having the ability to monitor and adjust strategy use (e.g. use of ratios in image sizing).

#### **Essential Questions**

How can you divide tasks among team members in order to develop an effective product?

#### Mapping the Big Ideas

Session/ Core Activity Day 1: Refresher Intro to Web Design (refer to Unit 3)	Description Youth review the design process, and learn about their clients and Web site projects. Ask these Youth to share what they learned last year in the Build IT summer program.	IT Professional	Mathema- tical Disposition: Ratios	Perfor- mance Task	Collab- oration	Leadership (Client Input)	IT Professionals Work With Others	variety of careers
Day 2: Field Trip (refer to Unit 3)	See Summer Fieldtrip Prep Sheet in Unit 3. BE SURE TO DO THE VENN DIAGRAM ACTIVITY AND/OR HAVE YOUTH TAKE PICTURES OF THE IT PROFESSIONALS AND ASSEMBLE THEIR TEAM: PRODUCER, GRAPHICS, SOFTWARE ENGINEERS, OPERATIONS, USABILITY, CONTENT, OTHERS	HCI/ Interaction Designers					Х	Х

IT has

Session/ Core Activity	Description	IT Professional	Mathema- tical Disposition: Ratios	Perfor- mance Task	Collab- oration	Leadership (Client Input)	IT Professionals Work With Others	IT has a variety of careers
Day 3: Gather input from clients and users (refer to Unit 3)	Youth consult with their clients about the work they want done. Talk with users if they area available. Begin first 4 phases of the design process. Establish team members' responsibilities.				Х	Х		
Day 4: Field Trip (refer to Unit 3)	See Summer Fieldtrip Prep Sheet	Business Websites Variety of Careers					Х	X
Day 5: HTML: Need to Know (refer to Unit 3)	Youth learn HTML that they need to know with help of HTML books and facilitator. Youth consider images they'll need and where to find them.				Х			
Day 6: Sizing an Image (see Day 6 in Unit 6)	Youth use ratios to determine the appropriate sizes of their images. Youth continue work on layout and images		Х		X	Х		
Day 7: Field Trip (refer to Unit 3)	See Summer Fieldtrip Prep Sheet	Business Websites Variety of Careers					Х	Х
Day 8: Finish First Draft of Project (refer to Unit 3)	Youth continue working on their project. By the end of this day, they should have most of the work done on their pages, ready for the client to view. Facilitate Youth reflection on the HTML they've learned.				Х	Х		
Day 9: Field Trip (refer to Unit 3)	See Summer Fieldtrip Prep Sheet	Communication Criented Websites & Tools					X	Х

Session/ Core Activity Day 10: Celebration & Presentation to Client	Description Youth present their pages to the client, get feedback and incorporate that feedback.	IT Professional	Mathema- tical Disposition: Ratios	Perfor- mance Task	Collab- oration	Leadership (Client Input)	IT Professionals Work With Others	IT has a variety of careers
			X	Full	X	X		