CALIFORNIA 4-H PROJECT SHEET SERIES

4-H Website Design Project

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It's a fun and important skill to know how to communicate information effectively in the digital age through computers, the internet, and connected devices. Computers were the first devices people used to access the internet, but people now read, listen, and watch information from an array of devices, including smartphones and tablets.

A good website is designed to transmit, process, and help people use data efficiently. In this project, members will learn

- to design, code, and build an effective website using website builders and code
- to optimize a website for mobile devices, for fast load time, and for people who can't view the images
- to create graphics and human-centered designs for websites
- to share information using best practices of communicating information

STARTING OUT, BEGINNER

- Learn about the history of the internet and World Wide Web.
- Determine criteria to evaluate a website's effectiveness; use the criteria to compare websites.
- Create a website for your 4-H club using a free website builder.
- Add visual content or dynamic content to your website, such as a video or email sign-up form.

LEARNING MORE, INTERMEDIATE

- Optimize your website for mobile phone screens.
- Enable analytics on your website to better understand visitors.
- Learn about graphic design rules to improve website usability.
- Test your website for compatibility with screen reader software (often used by people who are blind or visually impaired).
- Explore and compare website methods to share information with your 4-H club.

EXPLORING DEPTH, ADVANCED

- Delve into website code, including HTML, XHTML, CSS, and jQuery/JavaScript.
- Learn about the internet of things (IoT) and how everyday objects are connected to the internet.
- Learn about server-side programming (e.g., PHP) with databases to greatly enhance the capabilities of a website.

The activities above are ideas to inspire further project development. This is not a complete list.

Light your spark | Flex your brain | Reach your goals

Expand Your Experiences!

Science, Technology, Engineering, and Mathematics (STEM)

- Design multiple versions of the same website and then pilot test them to compare people's reactions.
- Explore principles in human-centered design and how they influence website design.
- Design a website to promote STEM education in your county.

Healthy Living

- Learn more about ergonomics and ensure your computer workspace promotes good health.
- Compile a list of effective health websites and share them through a 4-H presentation.
- Explore how websites and online resources are used in providing virtual health care.

Civic Engagement

- Find a local nonprofit and offer to design a web page or a website.
- Investigate broadband access in your community and find ways to improve access to the internet.

Leadership

- Become a junior or teen leader.
- Present a workshop to younger members on the basics of website design.
- Become the moderator of an online social forum website (for those 13 years of age and older).

College and Career Readiness

- Explore careers in website design, including programming, graphic design, and database design.
- Visit a local college or university department of graphic design.
- Design and create an online portfolio highlighting your project work.

CONNECTIONS AND EVENTS

Presentation Days — Share what you've learned with others through a presentation.

Field Days — At these events, 4-H members may participate in a variety of contests related to their project area. Contact your county 4-H office to determine additional opportunities such as a county resource fair.

CURRICULUM

- Code.org
  https://code.org/
- Khan Academy — Intro to HTML/CSS
  www.khanacademy.org/computing/computer-programming/html-css
- Codecademy
  www.codecademy.com/learn/make-a-website
- WebsiteSetup
  https://websitesetup.org/

4-H RECORD BOOK

4-H Record Books give members an opportunity to record events and reflect on their experiences. For each project, members document their experiences, learning, and development.

4-H Record Books also teach members record management skills and encourage them to set goals and develop a plan to meet those goals.

RESOURCES

- HTML Element Reference, www.w3schools.com/tags/
- CSS Reference, www.w3schools.com/cssref/
- Accessible Information Technology in Education (AccessIT), www.washington.edu/accessit/webdesign/student/unit4/module1/Guidelines_for_web_graphics.htm
- Web Design for Kids, www.rasmussen.edu/degrees/design/blog/web-design-for-kids/
- Webpage Design Resources, www.augie.edu/dept/edtech/WBIdesign.html
- Usability.gov, www.usability.gov/

The UC 4-H Youth Development Program does not endorse, warrant, or otherwise take responsibility for the contents of unofficial sites.

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

4-H Thriving Model

4-H programs done well help youth thrive. No matter what project or activities are offered, the project leader should help ensure youth engagement with a focus on these three contexts:

FACILITATE YOUTH SPARKS

A spark is something youth are passionate about; it really fires them up and gives them joy and energy. Youth use their spark to make the world a better place.

Sparks create action, provide fuel for growth in knowledge and skills. Sparks grow a young person's networks.

Help youth find how this project may bring them joy, purpose, and direction.

To learn more: https://tinyurl.com/y2lwct7u

PROGRAM QUALITY MATTERS

Research shows that youth programs must be done well if they are to make a positive difference in the lives of youth.

Quality programs ensure:

- Physical and psychological safety.
- Appropriate structure.
- Supportive relationships.
- Opportunities to belong.
- Positive social norms.
- Support for mattering.
- Opportunities for skill building.
- Integration of family, school, and community.

To learn more: https://tinyurl.com/yxg27m3j

FOSTERING DEVELOPMENTAL RELATIONSHIPS

Caring, supportive adults are clearly connected to positive youth development.

Across the childhood years, youth need different things from adults as they learn, grow, and self-regulate. What should remain constant from all adult volunteers and staff:

- Expressing care through listening, warmth, and dependability.
- Challenging growth by expecting youth to do their best.
- Providing support.
- Sharing power.
- Expanding possibilities.

To learn more: https://tinyurl.com/y6434ntw

For Further Information

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