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Intro to Programming

Thanks to the work of dozens of Information Technology professionals at Montana State University and a generous donation from David Kane Consulting, several Raspberry Pi coding computers are built and ready to share with 4-H Programs across Montana. The project provides access to technology education with Raspberry Pi coding computers, educational resources and mentoring to kids in rural areas of Montana who otherwise may not have access to this education due to their geographic location or socio-economic status. Raspberry Pi computers provide an easy way for youth to learn the science of coding. Youth can create games, digital art, apps and more using the Raspberry Pi computers and their new knowledge of coding.

Who can apply?

Teams of three to five 4-H members between the ages of 10-14 with a volunteer leader or parent who is willing to become a 4-H leader. Leaders do not need to have any prior coding experience. They will help guide members through the project as adult mentors and will have an opportunity to learn with the kids. Preference will be given to teams in rural Montana who otherwise may not have access to technology education due to their geographic location or socioeconomic status.

What if I know nothing about coding or what a Raspberry Pi computer is?

That is great. All you need is interest in learning how to code and trying something new.

What will I learn?

This is an introductory project for members with little to no prior coding experience. Members will learn basic programming fundamentals using the python programming language and the tools provided by the Kano Raspberry Pi operating system. At the conclusion, members will have an opportunity to use new skills to create a final project that may be shared at our coding project showcase. Teams are asked to share their project at a local 4-H event.

What do I need?

Teams must meet in a location with internet access, computer, large screen, speakers and a microphone to participate in the online portion of the project.

Each participating 4-H program will be loaned 3-4 Raspberry Pi computers for use for the duration of the project. The exact number will depend on the number of sites across the state and the number of members participating at each site. It is the responsibility of each program to ensure the Raspberry Pi are kept in a safe and secure location. Any damages will be the responsibility of the local 4-H program.

What help is provided?

There will be online project meetings led by Montana State University Extension information technology professionals and computer science students to teach lessons and answer questions. There are also many helpful online resources that teams and volunteers can use.

When does the project start?

The first online project meeting & orientation will take place on Monday, March 9, 6 to 8 pm. This meeting is required for all teams to attend. Eight subsequent sessions will take place on Monday evenings until mid-June.

How to apply:

Prior to submitting your application, please discuss your participation with your local 4-H agent, and to gain their support. Online applications will be received until midnight on February 18, 2020. 4-H agents will be contacted to confirm location participation in the project. Teams will be notified of their acceptance into the project by February 24, 2020.

To apply, visit: http://montana4h.org/projects/engineering_technology/coding.html
