



CoderDojo Belfast

Coolest Projects 2018 Project Ideas

Our theme is **Inclusiveness & Collaboration**, it's all about working together and letting everyone join in. (But if you have an idea you'd *really* like to do that isn't on that theme, go right ahead!)

Here are a few example ideas to get you thinking. (They're just examples, not something you have to follow exactly.)

Raspberry Pi projects

Build a zero-setup video communications box for keeping in touch with elderly relatives who don't want to learn how to use computers.

<http://www.instructables.com/id/Video-Calling-on-Raspberry-Pi-3/>
<https://eltechs.com/run-skype-on-raspberry-pi/>

At-a-glance display - hook up a Pi to a screen to create a display for useful info like:
- what the weather is going to be like.

<https://projects.raspberrypi.org/en/projects/dress-for-the-weather/>

- Local news and events

- A family's Google calendars - wall mounted display

<http://www.instructables.com/id/Raspberry-Pi-Wall-Mounted-Google-Calendar/> or

<https://lifehacker.com/build-a-smart-calendar-and-notification-center-for-fami-1751637798>

- a do-it-yourself web comic

https://googlecreativelab.github.io/coder-projects/projects/comic_creator/

TOP TIPS

1. Keep it simple.

Don't take on too much. Why not adapt something you've already done this year?

2. Work together

Work as a team and help each other out.

3. Ask for help

Don't get stuck trying to fix something that isn't working, ask a mentor.

Gamemaker/Scratch

Turn a game you have already made into a team game. For example change a game you have done before using either Gamemaker or Scratch into a “relay race”. Each level must be completed by a different player who can pick their own player and to finish the game every player has to score 80% on their own level? Perhaps on each level the player must find an item to help the next player on the next level?

AppInventor

There are ideas at <http://appinventor.mit.edu/explore/ai2/tutorials.html> that could be adapted for the competition. For example, AppInventor has location and file sharing capabilities - what about creating an app combining <http://explore.appinventor.mit.edu/displaying-maps> and <http://explore.appinventor.mit.edu/ai2/file-sharing> for periodically/easily sharing your location with your parents, so they can no longer complain about not knowing where you are? (haha)

Lego Mindstorms

How about creating a program for each of several mindstorm robots to perform together at the same time so that they all do a co-ordinated ‘dance’ together?

Minecraft: Education Edition

How about “Build your own Belfast” - a bit like the examples at <https://education.minecraft.net/lessons/urban-planning-project/> or <https://education.minecraft.net/lessons/chinese-tang-dynasty-capital/>, let’s get a team to build our own copy of Belfast in a shared server. Can you work as a team, and ensure everyone gets a chance to contribute? Who will build the cranes? Who will build the Titanic building?

Web projects

Can you build a page to be a family noticeboard where everyone can keep the family posted on what they are doing? (“I’ll be home at 11.30!”)

Can you get together with another project and offer to build a web page for what they are doing?