



## TOOLKIT: HANDS ON HACK – CODING JAM @ THE FCL & ONLINE

The the [European Coding Initiative](#), along with the [Future Classroom Lab](#) ambassadors and Learning Labs' network, is organizing an international hackathon on 20th of October, where teams from schools and learning labs across Europe and beyond will have the chance to build and share their projects. [The guidelines to know how to participate in this event can be found here.](#)

If you are planning to participate in the international Hackathon, **have a look at the following resources**, that can guide you to choose the right programming tool you would like to use during the event.

### Materials & lesson plans

There are several repositories of resources where you can find user friendly and relevant teaching materials for your event:

**The All You Need is {C<3DE}** [resources repository](#) can give you ideas on many fun tools you can use in your classes.

On the **Europe Code Week website** you can also find a [list of resources](#) to help you get started.

**Coding without a computer** engaging games and puzzles that use cards, string, crayons and lots of running around. Instructions, videos, resources and many more can be found on [CSunplugged](#).

Simple tutorials for beginners on [Code.org](#) that can be completed in an hour or less, including "**unplugged**" activities that require no computer at all. You can also check out the [Hour of Code resources for educators](#).

Free tutorials and useful resources are available on [Kata](#), an open forum for the **CoderDojo community** to share resources with everybody.

## Some examples & most popular resources



Program simple **interactive stories, games, and animations**, using a visual programming language: [Scratch](#) (available in over 40 languages) or [Scratch Junior](#) (ages 5-7).

Create a **3D and interactive game** using a simple visual programming language called [Kodu](#). Thousands of teachers already tried it out, and no previous programming experience is required!



**Design a website** following the instructions step by step and using text-based programming on [CodeAcademy](#).

You can even **make music** by using code - [Sonic Pi](#) is a tool for composing and performing music with code. If you are a beginner, you can also opt for [earsKetch](#).



[Yoothspark Hub](#) is a Microsoft initiative through which you can learn computer science. The website offers you [a wide range of programs](#) you can use to learn how to code

Find [here](#) other teaching resources to use with the Raspberry Pi, the tiny, low-cost computer.



Finally, [Code Combat allows you to](#) learn how to code by playing a game. You can even choose which programming language you want to learn.

Program, play, and share your own **games, animations, interactive art, music videos**, and many kinds of other apps, directly on your phone or tablet with [Pocket Code](#).



## Promotion & social media

If you are interested in the initiative and are considering to set up a team and join the hackathon, The Hackathon aims to promote the importance of teaching and learning how to code. The more people get engaged in the campaign, the stronger the message will be.

Find like-minded teachers and help us to spread the word about the initiative via:

 All you need is code Facebook at [NeedCodeEU](https://www.facebook.com/NeedCodeEU)

 All you need is code Twitter at [@NeedCodeEU](https://twitter.com/NeedCodeEU)

 [Future Classroom Lab](https://www.facebook.com/FutureClassroomLab) Facebook page

 #HandsOnHack

## Online courses for teachers

Several open courses are available online for teachers willing to learn new and innovative ways to teach computing. Here you can find some of them:

[\(EN\) How to Teach Computing: An Introduction to Concepts, Tools and Resources for Primary Teachers](#)

[\(EN\) How to Teach Computing: An Introduction to Concepts, Tools and Resources for Secondary Teachers](#)

## Europe Code Week 2016

Europe Code Week is a grass-roots movement that celebrates creating with code. The idea is to make programming more visible, to show young, adults and elderly how you bring ideas to life with code, to demystify these skills and bring motivated people together to learn. The initiative was launched in 2013 by the Young Advisors for the Digital Agenda Europe.

**WHEN:** 15-23 October 2016 **WHERE:** Online all around Europe and beyond

### How can teachers contribute to the Code Week?

Teachers can participate by holding coding classes or peer learning sessions, by sharing their lessons plans and organising workshops for colleagues. Check out the Coding Map of Europe [visiting the events page](#) to see what other people are up to, and [add your own event](#). Don't worry if you don't know how to code; in this toolkit you will find many useful resources (tutorials, lesson plans, materials) which are easy to follow and also to replicate. You will become a coder in the blink of an eye.