Code Week Toolkit for Teachers & Schools
By AllYouNeedisCode.eu

"I love coding because my ideas come alive with coding. There are so many possibilities with coding." Lauren Boyle, Digital Girl of the Year – 2014, Founder of Cool Kids Studio, (9 years old)

WHEN: 10th – 18th October 2015

WHERE: Online and offline, all around Europe and beyond

WHAT IS THE CODE WEEK?

The Europe Code week has been created with the aim of bringing more visibility to coding and to motivate people of all ages and background to start coding. If you want to see what it has been done during the previous editions of the Code Week, you can visit the dedicated blog. Now, Europe Code Week 2015 returns with many more exciting events and activities.

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.

You can even plan to **join forces with your headmaster and colleagues** and organise **a school-level event**. If you are planning to do so, you can contact us at (coding@eun.org) and we will give you a special code to team up with your school peers.

HOW TO ORGANISE YOUR OWN EVENT

Europe Code Week is all about inspiring people to start coding and for this purpose there are no strict limitations regarding the type or the structure of the organised events. Here are some tips that would ensure the smooth running of any activity:

- Make the event **beginner friendly** and make sure that you engage even those with no previous programming experience. Don't go in depth into technicalities, just show the practical aspects in a fun and engaging way.

- The **format of the event is up to you**! We do however recommend to include at least practical, hands-on activities, where participants can create something on their own.

- Use the **tools and technologies that you are most familiar with**, although we do favour freely available open source tools and frameworks.

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- A **smile and a friendly atmosphere** can help to break the ice and make people with no previous experience to feel at ease.

  Bonus hint: Drinks and small snacks will make people of all ages happy.

- Plan **a follow – up** in order to encourage students, colleagues and parents to keep on learning by providing further materials and assistance.

- Remember to **register your event/lesson/workshop into the** Code Week map. If you do so and then briefly report on how it went, you will get a virtual **certificate**.

WHAT YOU NEED FOR A #CODE EU EVENT

You already have the most important element - a group of people willing to learn, i.e. your students, colleagues or parents. Here are some other practical issues to be taken into account:

A place to be –you can be either in your classroom or in any other space you deem suitable, provided that you have previously equipped it with everything you need.

Finally, you will need something to work on / to teach / to learn - Develop a game, make an app, teach and learn HTML, create a blog and so on. Anything you can come up to will be a good idea. You won't be able to create programmers in a day or a week, but you will show your participants how fun it can be to create something on your own. **To make things easier for you, we have provided a list of suggested materials (see below) you can start with.**

MATERIALS & LESSON PLANS

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

- **The All you need is {C<3DE}** resources repository can give you ideas on many fun tools you can use in your classes.

- You can reuse lesson plans created by teachers for teachers of all subjects and levels of experience: have a look at the teachers' lesson plans.

- 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.

Here are some examples of what you can do with some of the 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.

Teach and learn **coding without using computers**. CodyRoby, for instance, guides you through the creation of your own unplugged coding card game! Here you can find a ready-made starter-kit.

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.

PROMOTION & SOCIAL MEDIA

Europe Code Week 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

All you need is code Twitter at @NeedCodeEU

Code week Facebook at CodeEU

Code week Twitter at @CodeWeekEU

Why don't you share your experiences and ideas using these hashtags?

#codeEU #teachersCanCode #europeansCanCode #allYouNeedisCode

You can also join our **thunderclap campaign** {link coming soon!} and on the 12th of October, the following message will be automatically sent out by our social media accounts:
"Let's show #EuropeansCanCode! Join #codeEU & #allyouneediscode and share your talent! http://www.allyouneediscode.eu/"

Code Week Ambassadors have launched a **video contest** called **"Ode to Code"**, where everybody can record a short video showing the effects of joining the Code Week. Find out more here.

ONLINE COURSES FOR TEACHERS ON HOW TO TEACH COMPUTING

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
http://www.europeanschoolnetacademy.eu/web/how-to-teach-computing-

(EN) How to Teach Computing: An Introduction to Concepts, Tools and Resources for Secondary Teachers
http://www.europeanschoolnetacademy.eu/web/how-to-teach-computing

(EN) Africa Code Week: Teaching Programming to Young Learners
https://open.sap.com/courses/acw1-1

(FR) Africa Code Week: Enseigner la programmation aux enfants
https://open.sap.com/courses/acw1-1-fr

(EN) Africa Code Week: Teens Get Coding! Teens Get Coding" is for learners aged 12-17
https://open.sap.com/courses/acw2

(FR) Africa Code Week: Les Ados se mettent au code! Jeunes âgés entre 12 et 17 ans
https://open.sap.com/courses/acw2-fr

If you need help or you have any additional questions regarding the event, you can get in touch with your Code Week Ambassador or send us an email at coding@eun.org.

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