Coding.Club
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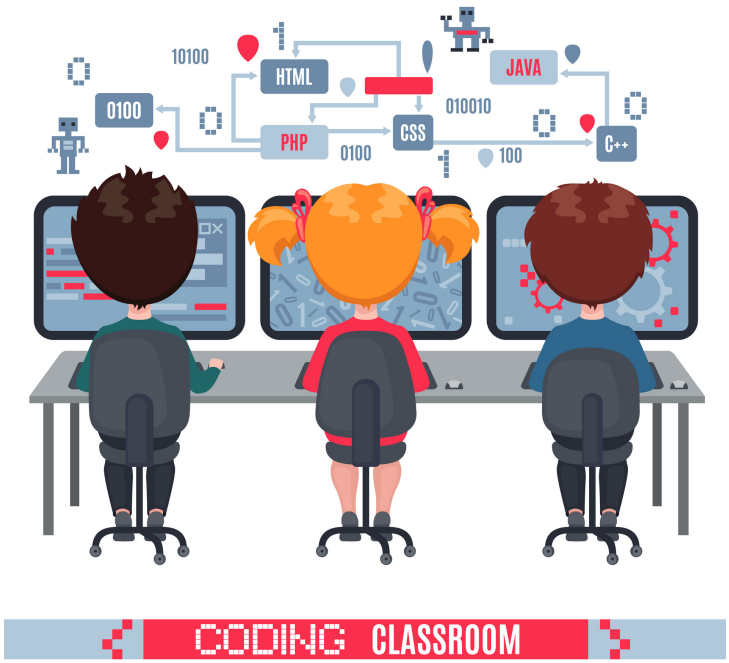
CODING CLUB

SUMMER HOLIDAY NEWSLETTER



WHAT'S INSIDE

CODING & CREATIVITY, IT'S NOT ONE OR THE OTHER!

Ya Ali Madad,

In today's digital age, coding is being used in many new and creative ways. As a result, many employers are looking for people with coding skills. People often do not associate coding with being creative but this is so far from reality. People can develop their creative skills whilst coding, and in turn use coding to be creative. Here are some of the jobs that encompass creativity and coding:

- Digital marketer
- Designer
- Writer
- Entrepreneur
- Blogger
- Freelancer

Creative thinking and programming are some of the most important skills for the future. So if your children like to put their creative hats on, how about encouraging them to do so whilst learning how to code? You and your children can even work on a creative coding project together!

Or you may consider one of many free online courses, such as An Introduction to Computer Graphics, through our partner institution Alison available on Headstart.

To find out more about coding and how to support your child's education, contact us at codingclub@iiuk.org.

The Coding Club team

SUMMER HOLIDAY ACTIVITIES: EDUCATIONAL GAMES TO LEARN AND IMPROVE CODING SKILLS

EARLY PRIMARY STUDENTS

Create your own Flappy Bird game

The Flappy Bird game is a nice introductory coding exercise for ages 5 and up, to get used to block-based coding and make a creative game. Younger ages may need some guidance.

The aim of this activity is to start off by learning how to do simple game functions like making something happen when the user clicks a mouse e.g. making a bird flap its wings. As the levels are progressed the participant adds more and more simple elements to the game. The final stage allows the creativity to shine through by allowing participants to make their own Flappy Bird game from scratch.

Visit **The Flappy Bird game** to play.

LATE PRIMARY STUDENTS AND ABOVE

Control an artist with code

Control an artist coding activity (for ages 10 and up) will really allow creativity to shine through. The activity is great for those who have some coding experience but also for total beginners.

The instructions have a clear guide for each step to explain how to pass each level. The idea is for the user to code an artist holding a pencil to move around (e.g. if the artist moves to the left, his pencil drags with him and draws a line to the left).

Each level tells the user what shape/design to draw and checks that it is correct when the program is run. The final level allows you to code the artist to draw any design at all.

Discover **Control an Artist** today!

CREATIVITY AS AN EXPRESSION OF OUR FAITH

We are all creative in some ways. Creativity is the ability or willingness to play with ideas and possibilities. Many people see creativity (Bida'h) as incompatible with Islam, but it is not. For centuries, Muslims have been inspired by their faith to engage in the wondrous buildings using architecture, melodic music, scientific discoveries, philosophy, astronomy and astrology, created magnificent monuments using engineering, and even have created the most majestic pieces of art using their skills.

Mawlana Hazar Imam reminds us that:

"freedom of expression is an incomplete value unless it is used honorably, and that the obligations of citizenship in any society should include a commitment to informed and responsible expression"

(Portugal, 12 February 2006)

As we keep our Imam's guidance in mind, coding is a wonderful opportunity to express our faith in creative ways.
What will you create to help those around us or share our creative spirit as Muslims?

THE STORY OF THE FIRST COMPUTER PROGRAMMER

Lady Ada Lovelace (1815-1852) was the daughter of Lord Byron, one of England's great romantic poets. Her mother, Lady Byron, was determined that Ada would learn the factual science of mathematics and logic in an attempt to quell what she perceived as the 'disease' of imagination that her father suffered from.

Ada is often considered the first computer programmer – that is the first person to have written an algorithm that could be carried out by a machine. Whilst her male colleagues considered the future of computers to be limited to mere mathematical calculations, Ada considered herself a 'poetical scientist', combining traits from both of her parents. Her imagination on integrating technological innovation in society far exceeded number crunching. Her closest colleague, Charles Babbage, affectionately referred to her as an 'Enchantress of Numbers' and 'Lady Fairy'.

For Ada, the progression of science required 'imaginative reality' rather than being bound by 'tunnel vision' which she considered to be the terminal disease of science.

WELCOME TO THE GLOBAL STEM FESTIVAL!

The Global STEM Festival (GSF) is an opportunity for 5-18 year olds to explore Science, Technology, Engineering and Mathematics (STEM) virtually.

Following on last year's successful programme, this year the GSF looks at "creating real life solutions for real life problems". This will be achieved by focusing on the United Nations' Sustainable Development Goals and how they apply to our everyday life as well as on global capacity.

The festival looks to equip participants with STEM skills to understand these problems, find sustainable solutions and consider their applications in real life. This will allow for exploration of the natural and created world around us, and further develop important skills, including critical thinking, problem solving, creativity, research and analytical skills.

The Festival is not a competition, but an opportunity to see the talent of the youth from around the world, and learn from one another. Although submissions are for 5-18 year old, this is something that parents/ guardians can get involved in.

The Global STEM Festival takes place from 26 June to 30 August and the Festival Finale will be held on 18-19 September 2021.

Register now!