

## Part I: Introduction

- Show introduction videos–
  - “Computer Science is Changing Everything” –
    - No matter what field you want to go into, Computer Science is changing that industry.
  - Getting to Know Rear Admiral Grace Hopper -
    - Who was this pioneer in computer science?
- Ways technology impacts our lives - saving lives, helping people, connecting people, etc.
  - 3D printing is being used to create limbs for amputees; microchips to find lost pets; Skyping relatives who are far away to keep in touch.
- Learning computer science is more than learning to code in a computer language, it's about learning how computers and software are changing everything in our world.
  - Digital animation in movies like Inside Out, Shaun the Sheep, Star Wars or Hunger Games; recording music with GarageBand on your computer, mobile banking.
- It's important to learn more about how technology works regardless of what career you want to go into.
  - Farming (using data for watering and fertilizing), fashion (programmable LED dresses at NYFW 2015), medicine (using robots for surgery)
- Think of all the things that use code in everyday life, or a list of careers the require knowledge of coding or computers.

## Options available in order to participate in activities

### Part II: Introduction to activities

#### Star Wars with Blockly (JavaScript)

Building a Galaxy with Code -

<https://studio.code.org/s/starwarsblocks/stage/1/puzzle/1>



#### Code your own sports game (Blocks)

Make a Basketball Game - <https://studio.code.org/s/basketball/stage/1/puzzle/1>

Code your own sports game - <https://studio.code.org/s/sports/stage/1/puzzle/1>

#### Minecraft Hour of Code – Hero’s Journey

Minecraft is back for the Hour of Code with a brand new activity! Journey through Minecraft with code. (Blocks) - <https://studio.code.org/s/hero/stage/1/puzzle/1>

#### Code in Python with CodeHS (Python)

Learn the basics of coding with the Python programming language by writing programs that you can interact with! This hour will cover printing, variables, math, and

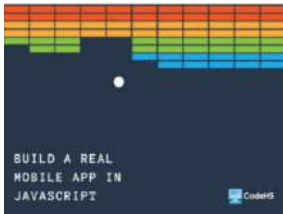




*"The 'Hour of Code™' is a nationwide initiative by Computer Science Education Week [csedweek.org] and Code.org [code.org] to introduce millions of students to one hour of computer science and computer programming."  
5<sup>th</sup> year of Hour of Code*

getting information from users. Write a program that take in and stores data from a user and returns a unique response!

<https://www.codehs.com/editor/hoc/video/543672/3844/2652?>



### Make a Real App with JavaScript (JavaScript)

<https://www.codehs.com/editor/hoc/video/558818/3846/2654?>

### Wonder Woman (Blocks)

In this activity, you'll code three unique scenes from the film using Blockly, an introductory coding language, to help Wonder Woman navigate obstacles and reach her goal. You'll use the power of sequences, variables, loops and conditionals to help Diana train against her opponents.

<https://www.madewithcode.com/projects/wonderwoman>



### My First Python Code (Python)



Learn Python basics using the first two modules on SoloLearn's Python app, consult discussions and comments to help you understand better, run code examples in the compiler to help with material retention. Write and compile a simple program that takes your name as input, counts the number of letters, and outputs the result. Share and get community upvotes.

<https://www.sololearn.com/Play/Python/hoc>

### Artist (Blocks)

Draw cool pictures and designs with the Artist! --

<https://studio.code.org/s/artist/stage/1/puzzle/1>



### Learn to Code with Crossy Road (Blocks)



In this suite of introductory coding lessons you will learn about making your own Crossy Road style mini-game. You will learn how to code algorithms and sequences, inputs / outputs, loops and iteration, selection and if-statements, and comparative operators and think like a computer scientist. Gamefroot Hour of Code tutorials use a visual programming language using blocks where students simply drag and drop visual blocks to write code.

<http://make.gamefroot.com/activity/code-with-crossy-road>