

Introduction to CS First – Scratch Google's Computer Science Curriculum

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What is computer Science?

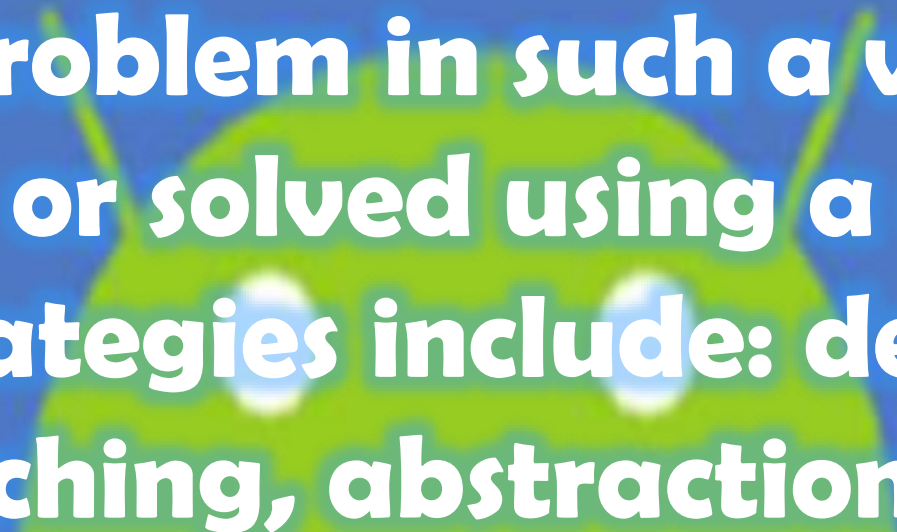


Using the power of technology to solve human problems.

Google™ | CS First

Computational Thinking

Modifying a problem in such a way that it can be modeled or solved using a computer or machine. Strategies include: decomposition, pattern matching, abstraction, algorithms.



collaboration

resilience

confidence

patience

organization

writing

empowerment

communication

creativity

math

experimentation

focus

storytelling

preparation

solving
problem

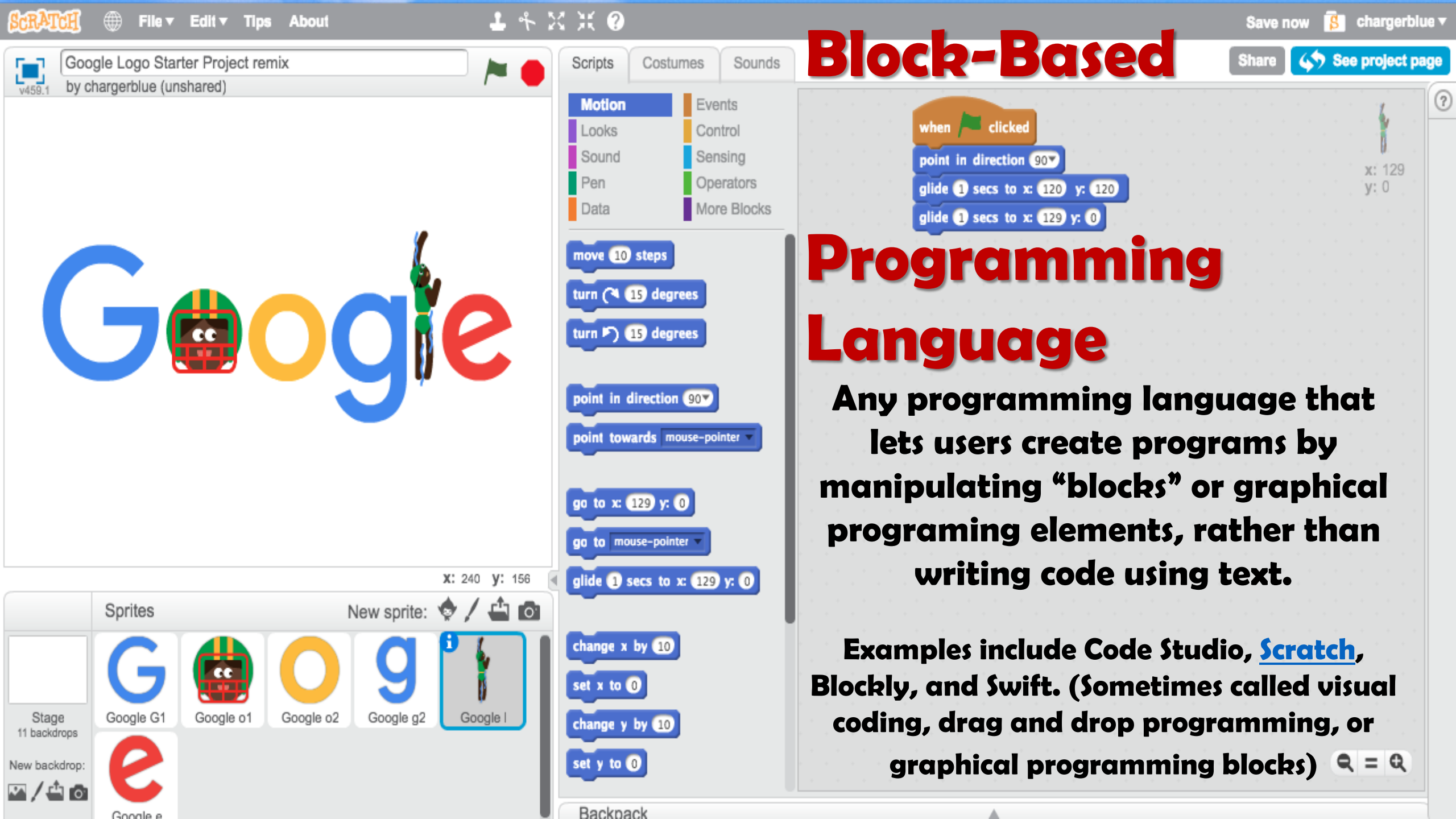


What is Coding Code

**The language that
programmers create and
use to tell a computer
what to do.**

HTML

PHP



Block-Based

Programming Language

Any programming language that lets users create programs by manipulating “blocks” or graphical programming elements, rather than writing code using text.

Examples include Code Studio, [Scratch](#), Blockly, and Swift. (Sometimes called visual coding, drag and drop programming, or graphical programming blocks)



Untitled

Scratch Basic Vocabulary



SPRITE

STAGE OR SETTING

Scripts

Motion

Looks

Sound

Pen

Data

forever

if then

if then

else

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

wait until

Costumes

Sounds

Events

Control

Sensing

Operators

More Blocks

when clicked

say Hello, world!

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

stop this script

Event + Command

SCRIPT AREA

ALGORITHM

A list/order of steps to finish a task

Each Block is a
COMMAND

OUTPUT

INPUT

If.... Then...
Statement

Sprites

New sprite:



Sprite1

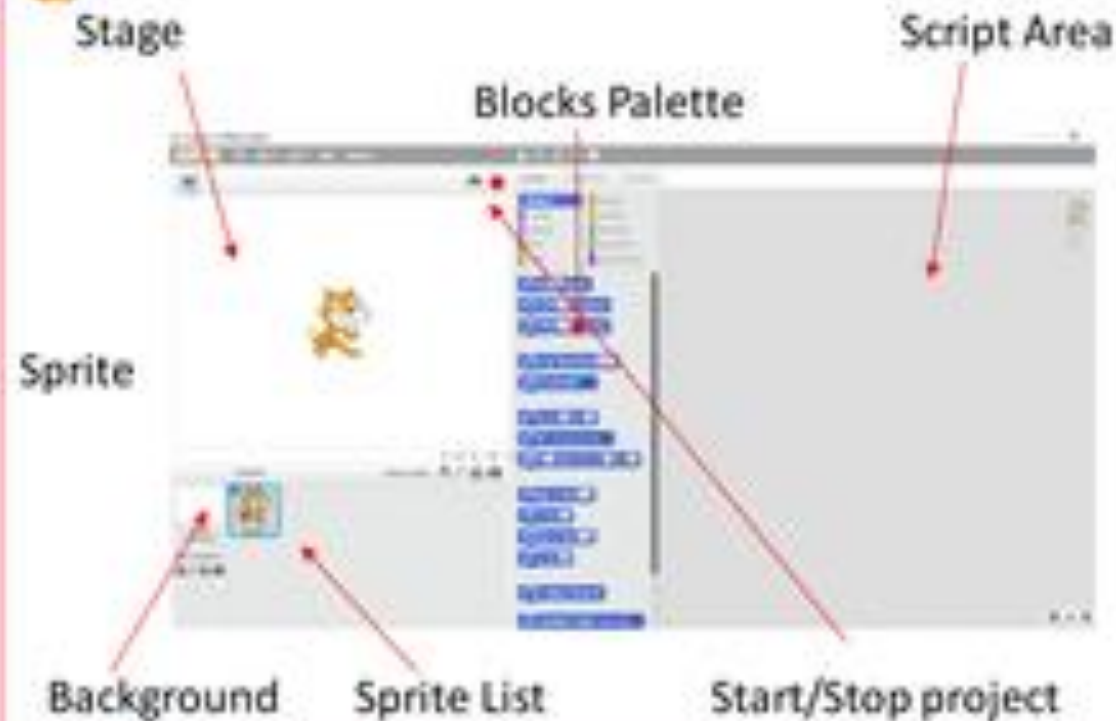
Stage
1 backdrop

New backdrop:





Interface



Selection

A decision within a computer program when the program decides to move on based on the results of an event.



Iteration

Sometimes an algorithm needs to repeat certain steps until told to stop or until a particular condition has been met, this repetition of instructions is called iteration.



Broadcast

A broadcast is a message that is sent through the Scratch program, activating receiving scripts.



Variables

A variable stores data in Scratch's memory.



First Day!

Operators/Logical Operators



Less Than
Equal To
Greater Than



Bug

An error in a program that prevents the program from running as expected.

Debugging

Finding and fixing problems in an algorithm or program.



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F.A.I.L

**First
Atttempt
In
Learning**



Let's Code



- Go our **Beazley Website – Mrs. Audino's ITRT Page**

Enter your class code: **C28PB9**

- Quick Links → CS First
- Enter Class Code: **C28PB9**
- **RECORD your USERNAME & PASSWORD**
- Watch the Introduction Video & Open Starter Project
- Watch as many add-on videos as you'd like

LET'S COOD

if I try my best then

SUCCESS

else

Try again!