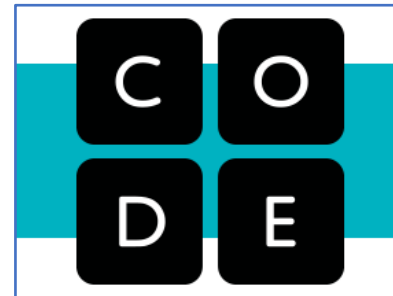


1-Learn how to code

- Go on the website : <https://code.org/>
- Create an account (if you don't already have one)
- Follow the tutorial : « Hour of Code », « Intro to App Lab »

This tutorial teaches you how to create and control buttons, text, images, sounds, and screens in **JavaScript**.

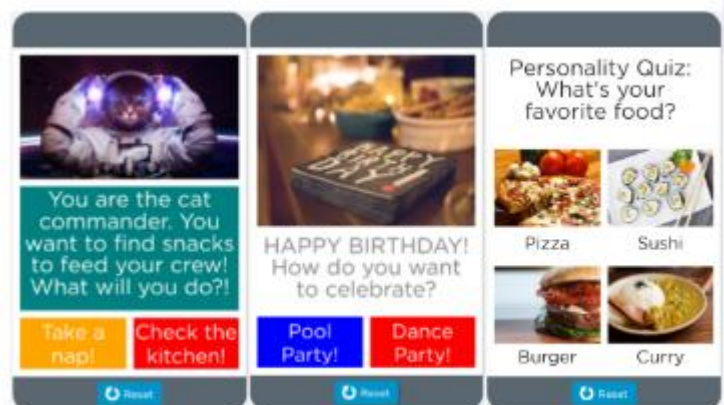


2-Create your own app

At the end of the tutorial, you have to customize one of the given apps.

It can be either « Choose Your Own Adventure », « Greeting Card », or « Personality Quiz » app.

If you feel so, you can create your own app from scratch by using AppLab on code.org



3-Describe your work

You have to prepare an oral presentation of your work.

In your presentation, you have to :

- 1) Describe the purpose of your app
- 2) Play it in front of the class (not for too long !)
- 3) Show the code and explain it
- 5) Change a few things on the code and show the effect
- 6) Ask for questions

4-JavaScript

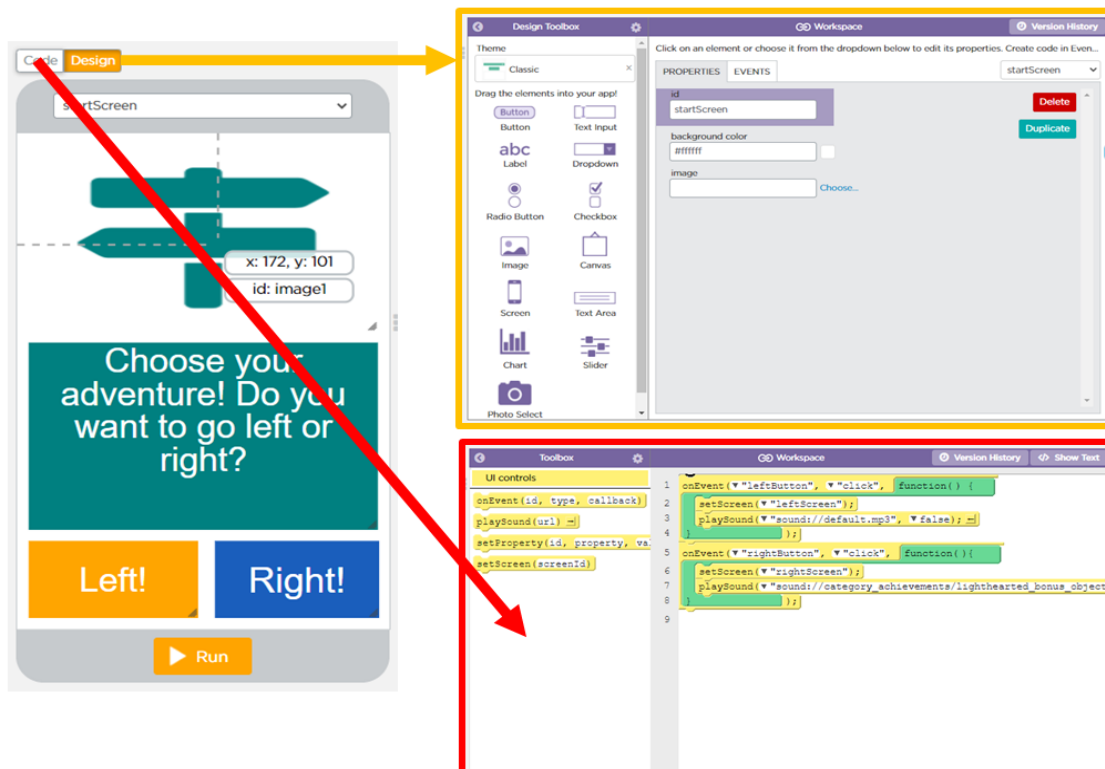
JavaScript, often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. In 2023, 98.7% of websites used JavaScript on the client side for webpage behavior.



Examples of use of JS

- Loading new web page content without reloading the page. For example, users of social media can send and receive messages without leaving the current page.
- Web page animations, such as fading objects in and out, resizing, and moving them.
- Controlling the playback of streaming media.
- Generating pop-up ads or alert boxes.
- Validating input values of a web form before the data is sent to a web server.
- Logging data about the user's behavior then sending it to a server. The website owner can use this data for analytics, ad tracking, and personalization.
- Redirecting a user to another page.

5-The two modes on AppLab



The image illustrates the two modes of AppLab: Design and Code. On the left, the Design mode is shown with a mobile app preview. A red arrow points from the Design mode to the Code mode on the right. The Code mode shows a workspace with a design toolbox on the left and a code editor on the right. The code editor contains JavaScript code for handling button clicks and setting screens.

```
1 onEvent("leftButton", "click", function() {
2   setScreen("leftScreen");
3   playSound("sound://default.mp3", false);
4 });
5 onEvent("rightButton", "click", function() {
6   setScreen("rightScreen");
7   playSound("sound://category_achievements/lighthearted_bonus_object");
8 });
9
```



Code your app in Javascript

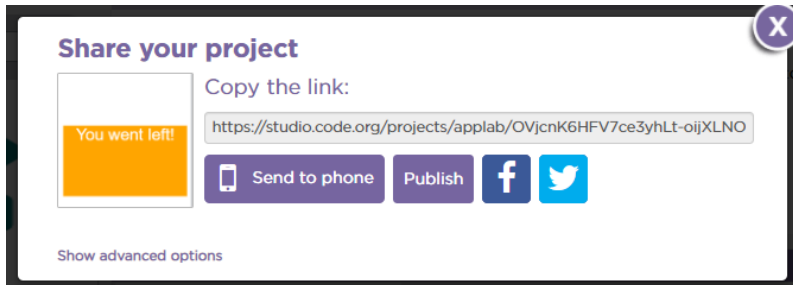


6-Share your work

Click on "Share"



Copy the link and paste it on the "ENT"



7-Learn the vocabulary

Debugging	Finding and fixing problems in an algorithm or program
Event	An action that causes something to happen
Event-driven program	A program designed to run blocks of code, or functions, in response to specified events (example: a mouse click)
Event handling	The coding tasks involved in making a program respond to events by triggering functions
Event listener	A command that can be set up to trigger a function when a particular type of event occurs on a particular UI Element
Callback function	A function specified as part of an event listener. It is written by the programmer but called by the system as the result of an Event trigger
UI : User Interface	The visual elements of a program through which a user controls or communicates with the application. Often abbreviated UI.
UI Element	On-screen objects, like buttons, images, text boxes, pull down menus, screens and so on.
Input	Data that is sent to the app (example: the fact that a button is clicked)
Output	Data that is sent from the app (example: a music is played)
Data type	All values in a programming language have a "type" – such as Number, Boolean, or string – that dictates how the computer will interpret it. For example 7+5 is interpreted differently from "7"+"5"
Expression	Any valid unit of code that resolves to a value
Variable	A placeholder for a piece of information that change