Intro to EV3

Learning Goals

- Build knowledge about coding and robotics.
- Code an **EV3** device.
- Have FUN learning!

Intro to EV3

Did you review the Getting Started document?

Do you have the Robocar with the EV3 attached?
Is the EV3 turned on?

Is the LEGO EV3 Classroom app open and on screen?
Is the EV3 connected and ready to use?

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Lesson Steps

1) Start an EV3 coding app project. Start Project
2) Coding the EV3 display. Exploration 1
3) Exploration 1 check-in. Check-in 1
4) Create your own display on the EV3. Exploration 2
5) Exploration 2 check-in. Check-in 2

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Click the New Project button.

(If you already have a new project open it is not necessary to complete this step again.)

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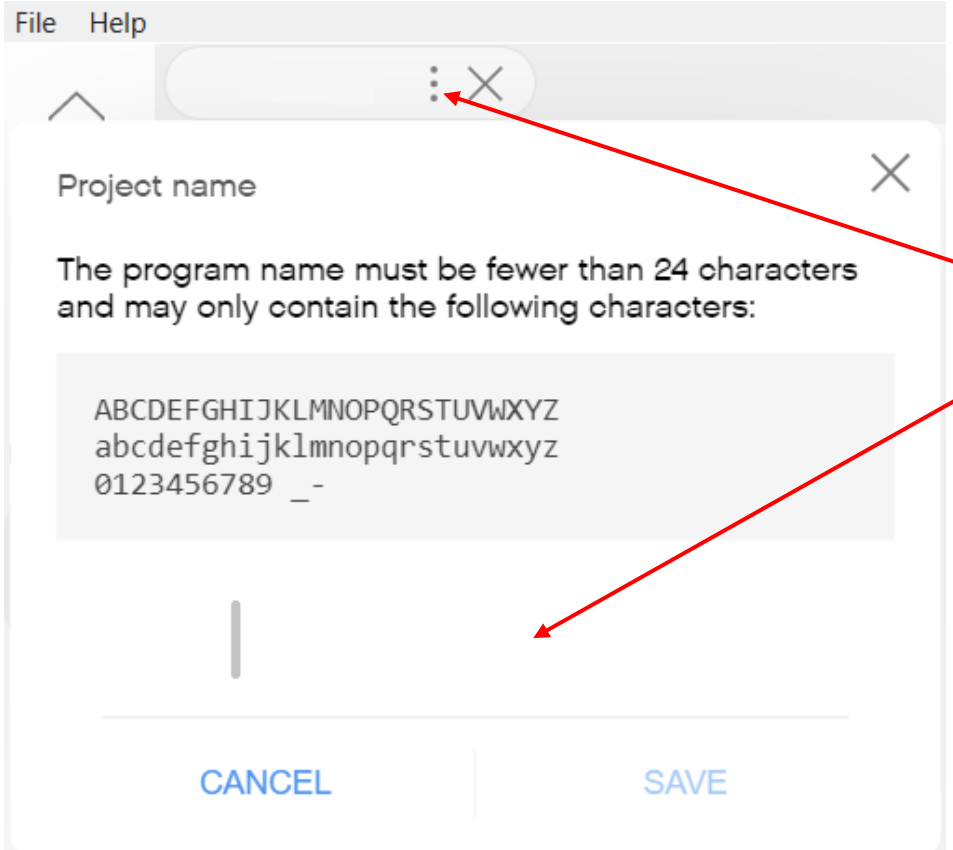

Name your program.

- Click the three dots.
- In the project name window type:

  Eyes-_____

  (your names).

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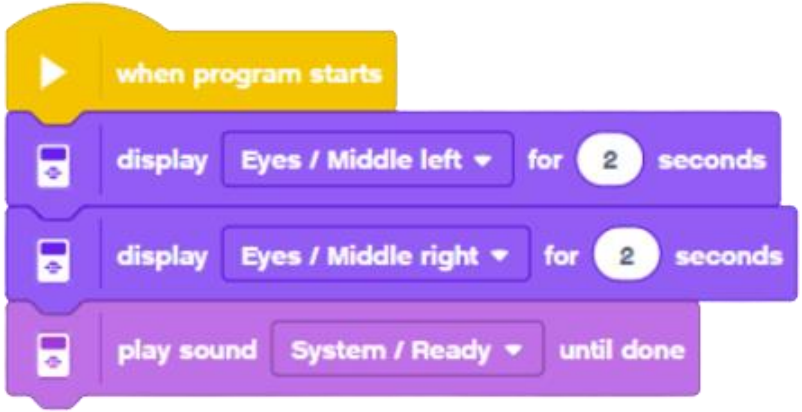
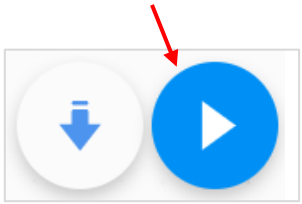
Intro to EV3 - Exploration 1

Create a code sequence to make the EV3 display eyes that look left and then look right.



Have EV3 play the "Ready" sound.

Click the run program icon in the corner of the EV3 Classroom app.



Observe what happens on the EV3 display.

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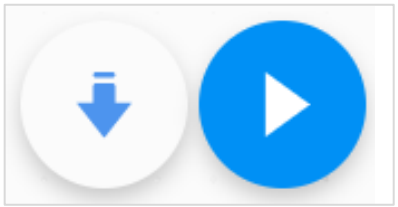
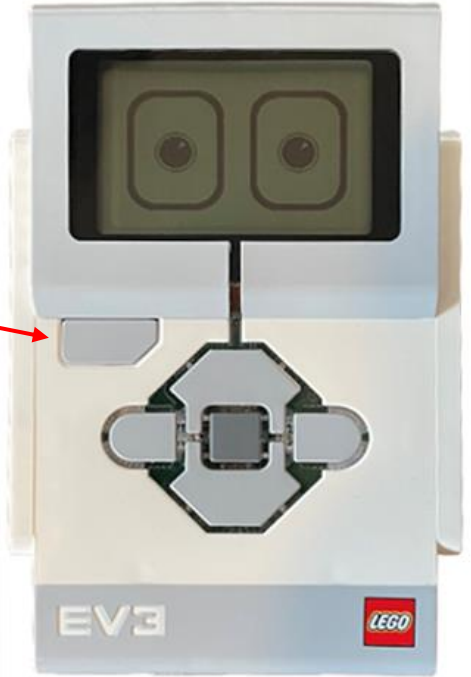
Once you have used the EV3 Classroom app to run (and download) your program you do not have to use the app to run it again.



Return your focus to your EV3 device.

Press the back button.



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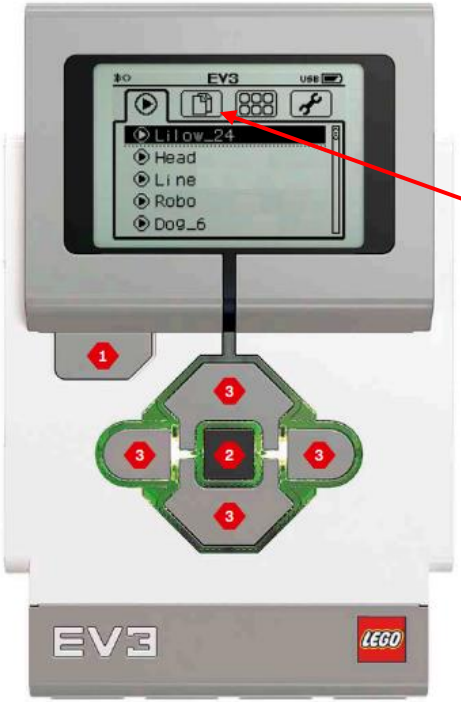

A downloaded program can be run directly from the EV3.

Your newly downloaded program will be added to the folders. Press the **menu** buttons to move to your "Eyes" program and then the **select** button to select your "Eyes" program on the EV3.

Press the **select** button one more time to run the "Eyes" program directly from the EV3.

1 - Back - stop program, go back, shut down EV3
2 - Select - select an action
3 - Menu - navigate the menus up, down, left, or right

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Intro to EV3 - Exploration 1

Think about it and discuss as a group.

1) Are you able to connect the EV3?
2) Are you able to use the code blocks to program the EV3?
3) Are you able to download programs to the EV3?
4) Are you able to select and run programs directly from the EV3?

Check in with Mr. Desmond.
Be prepared to show your coding and demonstrate how it works.

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Intro to EV3 - Exploration 2

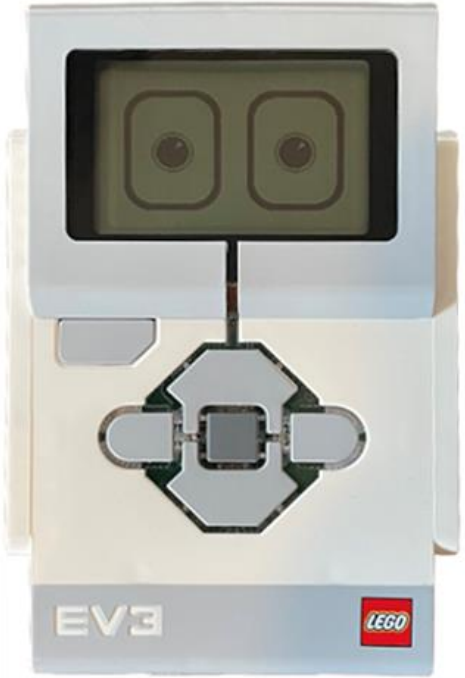
Create your own code sequence to make the EV3 display a variety images.

Add a couple of sounds to your program to go along with whatever the display is doing.

Click the download program icon in the EV3 Classroom app.

Run the program from the EV3.

Observe what happens on the EV3 device.



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Intro to EV3 - Exploration 2

Think about it and discuss as a group.

1) Are you able to independently use the code blocks to program the EV3?
2) Are you able to select and run programs from the EV3?

Check in with Mr. Desmond.
Be prepared to show your coding and demonstrate how it works.