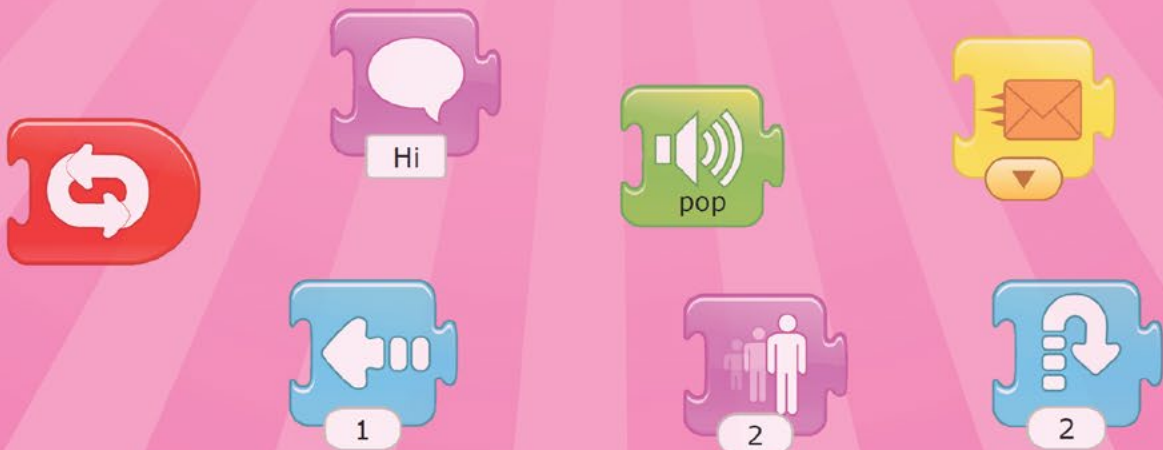**Author:** Rana Dajani

1ST GRADE

JUNIOR

SCRATCH PACK
CODING PROJECTS

Creative Coding Book for Kids

Lesson 01 Introduction to Scratch Jr

Exploring the Scratch Jr application and code blocks

Lesson 02 Row, Row, Row Your Boat

Moving objects across the screen

Lesson 03 Need for Speed

Adding more characters to the project
Moving different objects at different speeds

Lesson 04 Animate Your Name

Designing new characters
Animation code blocks

Lesson 05 Cat's Surprise

Using send messages block to start objects at different cues

Lesson 06 Gym Hall

Objects interact with each other

Lesson 07 Space Jam

Interacting with objects by clicking on them

Lesson 08 The Seasons

Changing backgrounds of project

Lesson 09 Sunset, Moonrise

Activating more than one program at the same time

Lesson 10 Spooky Forest

Reviewing and joining learnt blocks (On click block/ Change background)

Lesson 11 On Safari

Reviewing and joining learnt blocks (On touch/ Sending messages)

Lesson 12 Penguin Slide

Breaking a loop and resetting position

Lesson 13 Under the sea

Reviewing and joining learnt blocks (Sending messages/ Loops/ Break)

Lesson 14 My Story (Open Project)

Creating a whole project from scratch.

Lesson 15 Carnival Games (Open Project)

Creating a whole project from scratch.

Lesson 2
Row, row, row your boat

In this lesson, students will design a scene with a boat in the sea that is moving back and forth across the screen.

The students will learn:

- How to figure out how many movements it will take the boat to move across the screen using the move right/ left arrow blocks.
- How to keep those actions running using the repeat block/ forever block.

* The reset block will be very useful to put back the boat character in its original place so that they can keep experimenting and going through many trails and errors until they finish the project.

Can you row your boat across the sea?
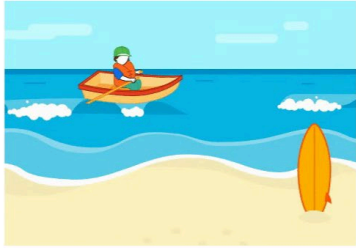
Choose a background and character.

Follow the set of instructions to recreate the movement of the boat as the one you see in the video.

1) You have to place your character in an original spot in your background

You might find that you need to resize your character.

2) You need to find out how far does the boat need to go to cross the sea

3) Add the instruction block needed to bring it back

4) Figure out a way to keep repeating these instructions over and over

Hint:
You can use this block to place your character back in its original position

Road to success is:

Test – Fix – Repeat

Are you up for a CHALLENGE?

Take it further:
• Recreate this scene based on what you learnt so far.

Challenge Code: