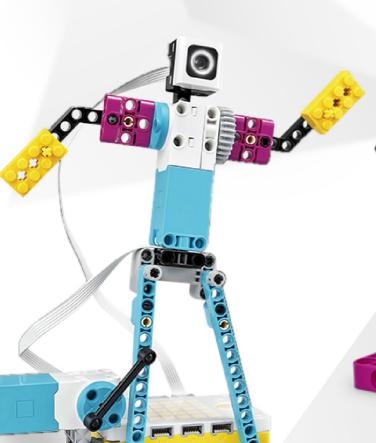
# **SPIKE™** Prime

**Projects** 







**LESSON PLANS** 

**Student Book** 



Author: Rana Dajani

# **Published by LKD Educational Resources**

Amman - Jordan Tel: +962 6 5374141

Fax: +962 6 5516404 P.O.Box: 851346

Email: info@lkd.com.jo Web: www.lkd.com.jo



# **Table of Contents**

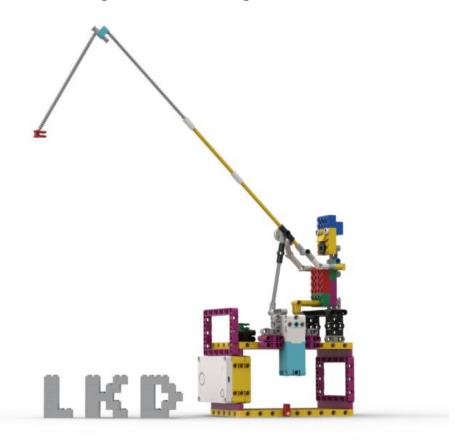
Units	Unit Title	Courses Name
Unit 1	Getting Started + Hopper	LEGO APP
Unit 2	Wheeling Chair	LKD PROJECT
Unit 3	Help!	LEGO APP
Unit 4	Helicopter Tilt	LKD PROJECT
Unit 5	Super Cleanup	LEGO APP
Unit 6	Lance Knight	LKD PROJECT
Unit 7	Marble Run	LKD PROJECT
Unit 8	Broken	LEGO APP
Unit 9	Fisher Man	LKD PROJECT
Unit 10	Loco Motion	LKD PROJECT
Unit 11	Warm Up	LEGO APP
Unit 12	Stretch with Data	LEGO APP
Unit 13	Pinball Machine	LKD PROJECT
Unit 14	Pattern Plotter	LKD PROJECT
Unit 15	What is This? (open project)	LEGO APP
Unit 16	Design for Someone (open project)	LEGO APP
Unit 17	SPIKE / Python (4 Lessons)	
	Lessons 1 SPIKE Prime / Python Introduction	LKD
	Lessons 2 Training Camp 1: Driving Around	LEGO APP
	Lessons 3 Training Camp 2: Playing with Objects	LEGO APP
	Lessons 4 Training Camp 3: Reacting to Lines	LEGO APP

# **Fisher Man**

Student Book - SPIKE Prime Project

#### Can you be a hunter gatherer?

Recreational fishing is fishing for pleasure or competition. It can be contrasted with commercial fishing, which is fishing for economic profit, or subsistence fishing, which is fishing for survival.



Watch the video to see what your bot is about to do.

#### **Build your Fisher Man.**

This fisherman is here to catch some fish.

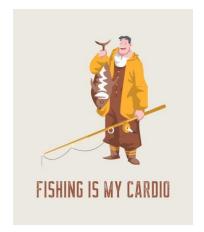
#### Let's try this code first.

This program will display the fishing rod on the screen.

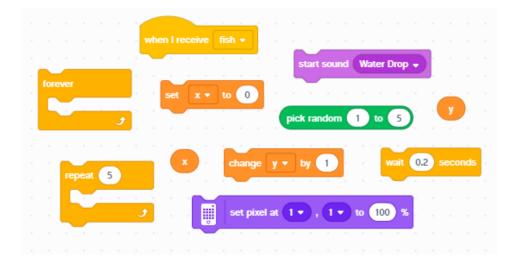
#### Now go fish.

Display a fish on the screen as a pixel of 100% brightness that randomly appears on the first row (y-coordinate =1 and x-coordinate=random 1 to 5.) and make the fish swim across the screen (change y by1.)

When the fish touches the fishing line that is on the screen light up the center button to green light.



# (HINTS)



Think about using these code blocks.

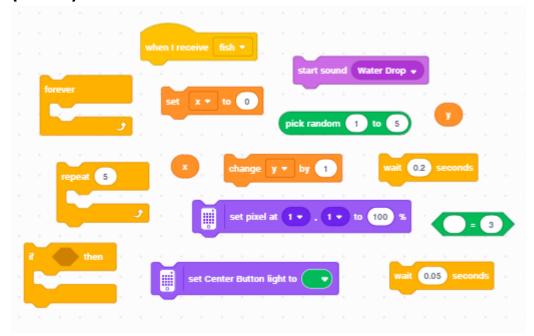
#### **EXTRA CHALLENGE**

#### **School of Fish**

Display another fish on the screen.



## (HINTS)



Think about using these code blocks.

## How did you do?



What did you do well? Is there anything you could've done better?

You're hooked!