

We already achieved  
so much, we're  
almost experts!

Let's try it out and  
build some attractions  
of an amusement park.



Do you think  
we can also  
do the tough  
tasks?

**Advanced 1**

# Information

What are we going to do?



I love to go to  
amusement  
parks!



Really?  
Me too!

# Task

We are going to build a seesaw.

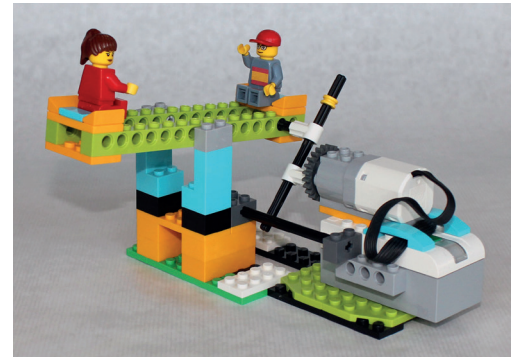


It is fun to  
build with  
lego.



see how a  
seesaw works

Diskrepanz doc  
und iBook



Yes, it is.



# Construction Manual

Please, follow the video instructions.



Building a seesaw  
isn't easy, but I'm  
sure you can do it!



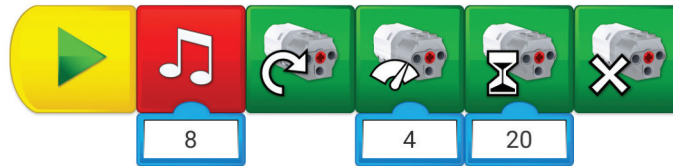
building the seesaw



This video will  
help you.

# Coding

We are going to use Lego WeDo 2.0 software.



How can we  
code the  
seesaw?



**Advanced 2**

# Information



Is the merry-go-round broken?



Yes, let's fix it!





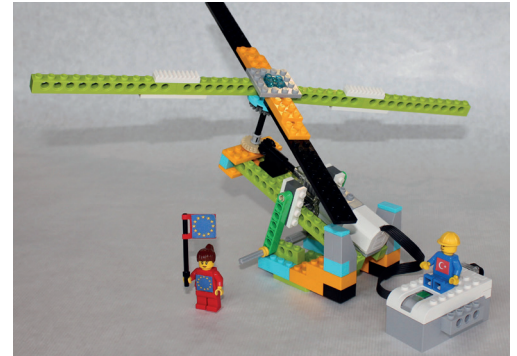
# Task



Make your merry-go-round rotate and let it move up and down.



merry-go-round  
working



Let's start  
working!



# Construction Manual



Here you can  
watch how to  
build the merry-  
go-round.



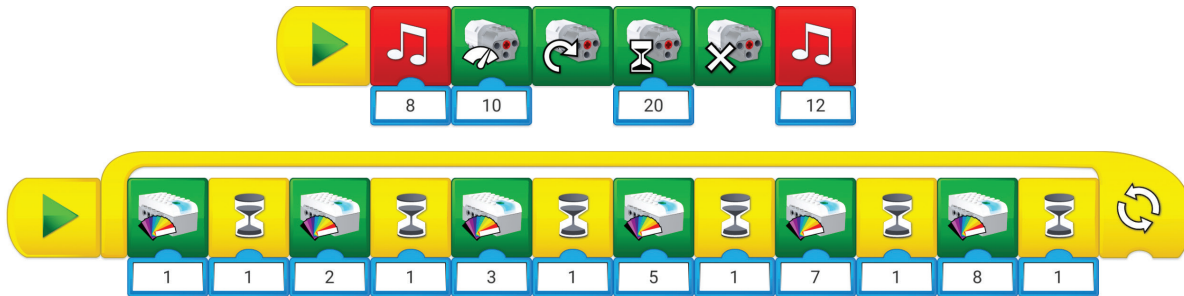
merry-go-round  
construction manual

Let's watch  
the video  
together!



# Coding

Do you know how  
to code the merry-  
go-round?



**Advanced 3**

# Information

Are you ready for a  
funny adventure?  
Do you have the  
courage to drive a  
bumper car?



Oh, this is going  
to be awesome!



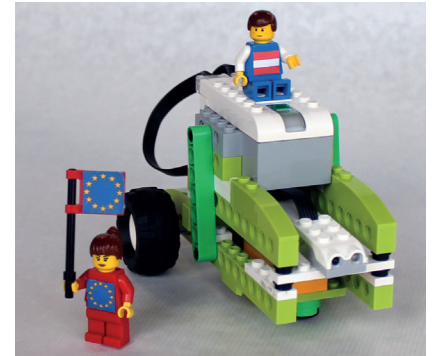
# Task



First, you need to think of how your bumper car should look like.



bumper car works



Do you like it convenient?  
Watch the video!



# Construction Manual

Build a car which can navigate around any obstacle and barrier to the left and to the right.



That's difficult!  
How can I achieve  
this with only one  
engine?



bumper car  
construction manual

Do you have an idea  
how to do it? If not,  
you can watch this  
video with the in-  
structions.



# Coding



You need special blocks for coding which you don't know yet.



bumper car  
construction manual

Ah, you mean  
this one:





**Advanced 4**

# Information



Oh, you  
scared me!



Do you like this  
monster? What  
if I told you this  
is my pet.



# Task

Build a monster for your amusement park!



It doesn't look  
so scary!  
I like it!



monster in action



This video can  
help you with  
the task



# Construction Manual



How can I make  
my monster come  
alive using a mo-  
tion sensor?



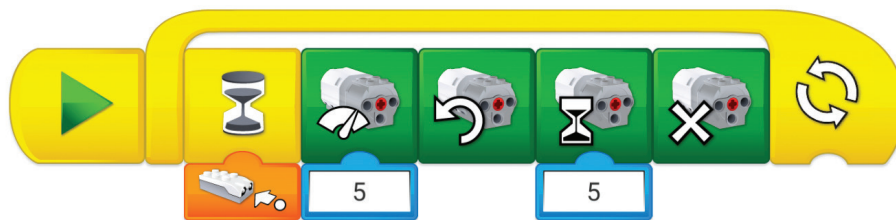
construction manual  
for the monster

This video will  
be a great help  
for you.



# Coding

How can we  
code the  
monster?



**Information**

# Blocks

## Flow Blocks



Start Block



Start On Key Press Block



Start On Message Block



Play Sound Block



Send Message Block



Wait For Block



Repeat Block

## Motor Blocks



Motor This Way Block



Motor This Way Block



Motor Power Block



Motor On For Block



Motor Off Block



Light Block

## Sensor Input Blocks



Distance Sensor Input



Distance Change Closer



Distance Change Further



Any Distance Change



Tilt Sensor Input



Tilt Up



Tilt Down



Tilt This Way



Tilt That Way



Any Tilt

## Display Blocks



Display Block



Add to Display Block



Subtract from Display Block



Multiply by Display Block



Divide by Display Block



Display Background Block



Display Closed Block



Display Medium size Block



## Device Inputs Blocks



Text Input



Number Input



Random Input



Sound Sensor Input



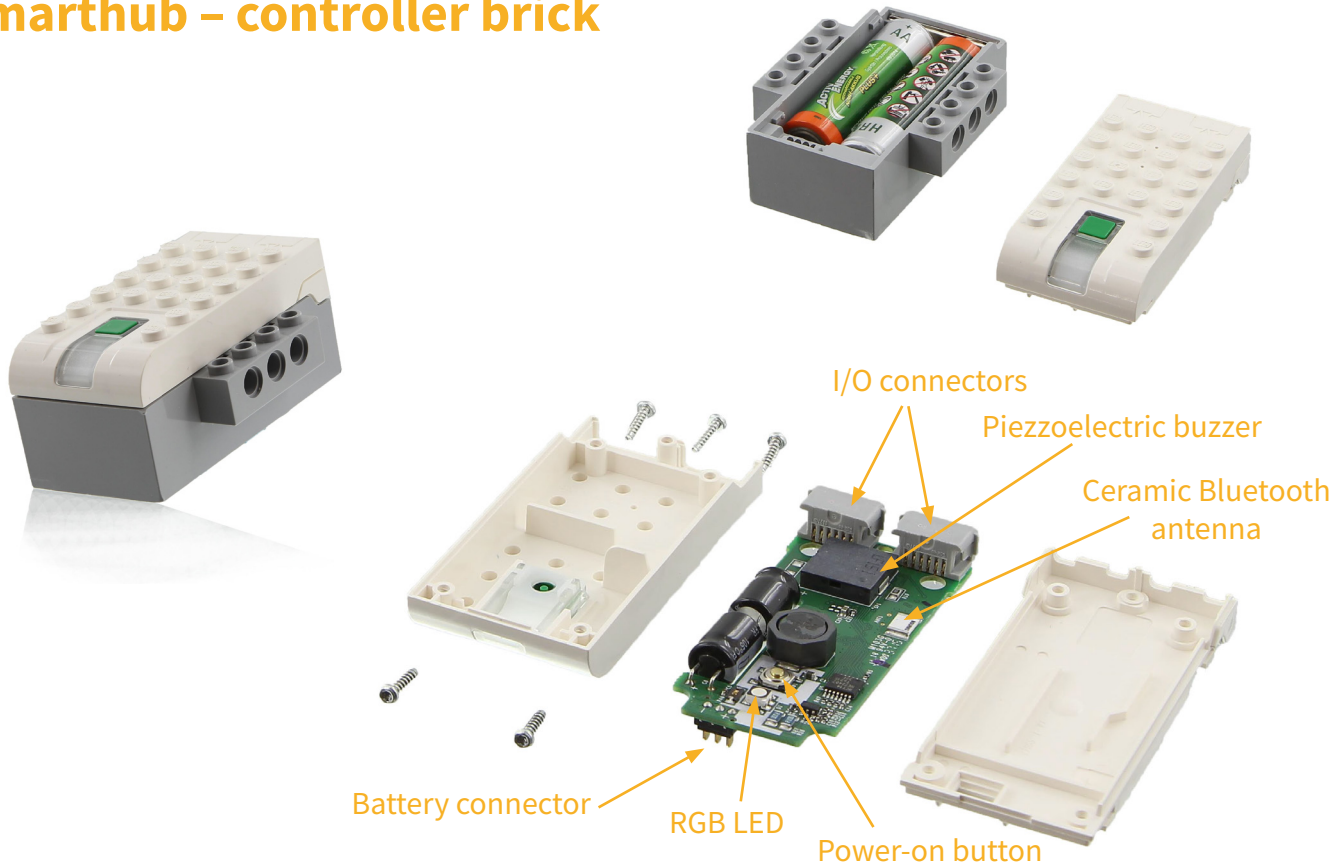
Display Input

## Other Blocks



Bubble

## Smarthub – controller brick



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**Austria – NMS Telfs Weissenbach ([www.nms-telfs-weissenbach.tsn.at](http://www.nms-telfs-weissenbach.tsn.at))**

**Latvia – Smiltenes gimnazija ([svs.edu.lv](http://svs.edu.lv))**

**Spain – Colegio Manuel Siurot S.Coop.And. ([www.manuelsiurot.es](http://www.manuelsiurot.es))**

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