



AUTODESK<sup>®</sup>  
TINKERCAD<sup>™</sup>

# Tinkercad

## Basic Usage Instructions

**1204 Digital Circuits Design Lab**

**Lecturer: Pantelis I. Kaplanoglou**

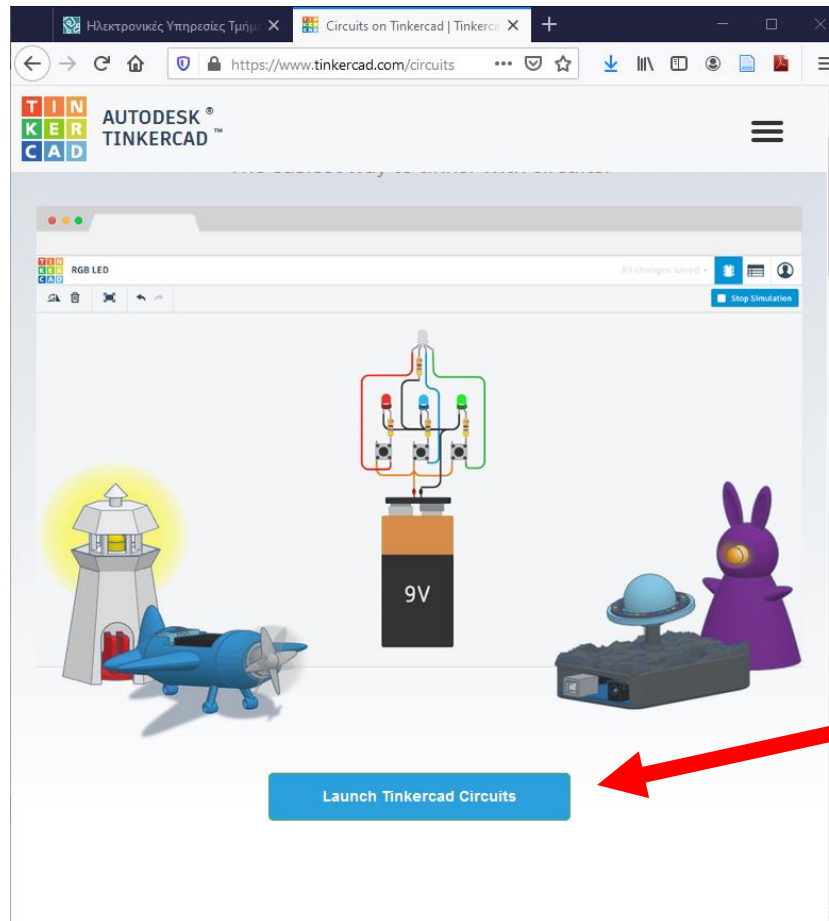
Department of Information and Electronic Engineering

**International Hellenic University**



# Step 1: Connect to Website

- Navigate to <https://www.tinkercad.com/circuits>
- Hit **“Launch Tinkercad Circuits”**.



# Step 2: Create Account / Sign In

- Choose **CREATE ACCOUNT** to create an AutoDesk account.
- Choose **SIGN IN USING SOCIAL PROVIDERS** to login with your Facebook/Google/Microsoft/Yahoo credentials.

Sign in



NEXT

OR **SIGN IN USING SOCIAL PROVIDERS**

NEW TO AUTODESK? **CREATE ACCOUNT**

# Step 2: Create Account 1/4

Create account



Country, Territory, or Region

Greece

Birthday

Month

Day

Year

NEXT

ALREADY HAVE AN ACCOUNT? [SIGN IN](#)

# Step 2: Create Account 2/4

- Create a sufficiently strong password and then click **CREATE ACCOUNT**
- You will receive a verification e-mail from AutoDesk.

## Create account

Email

 ✓

Password

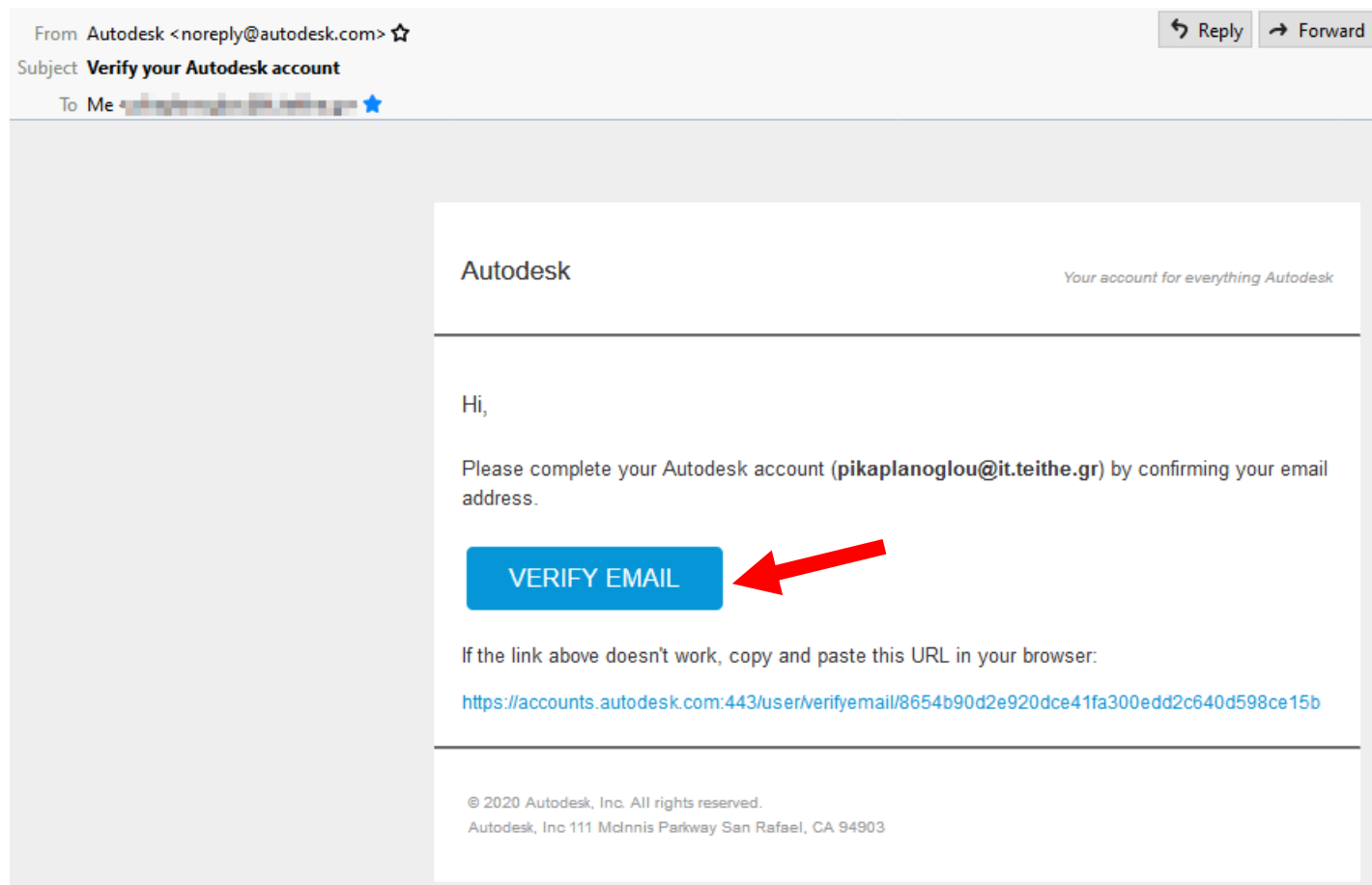
☒ I agree to the [Tinkercad Terms of Service](#) and the [Autodesk Privacy Statement](#).

**CREATE ACCOUNT**

ALREADY HAVE AN ACCOUNT? [SIGN IN](#)

# Step 2: Create Account 3/4

- On the e-mail message you have received click **VERIFY EMAIL**.



# Step 2: Create Account 4/4

Account created

This single account gives you access to all your  
Autodesk products



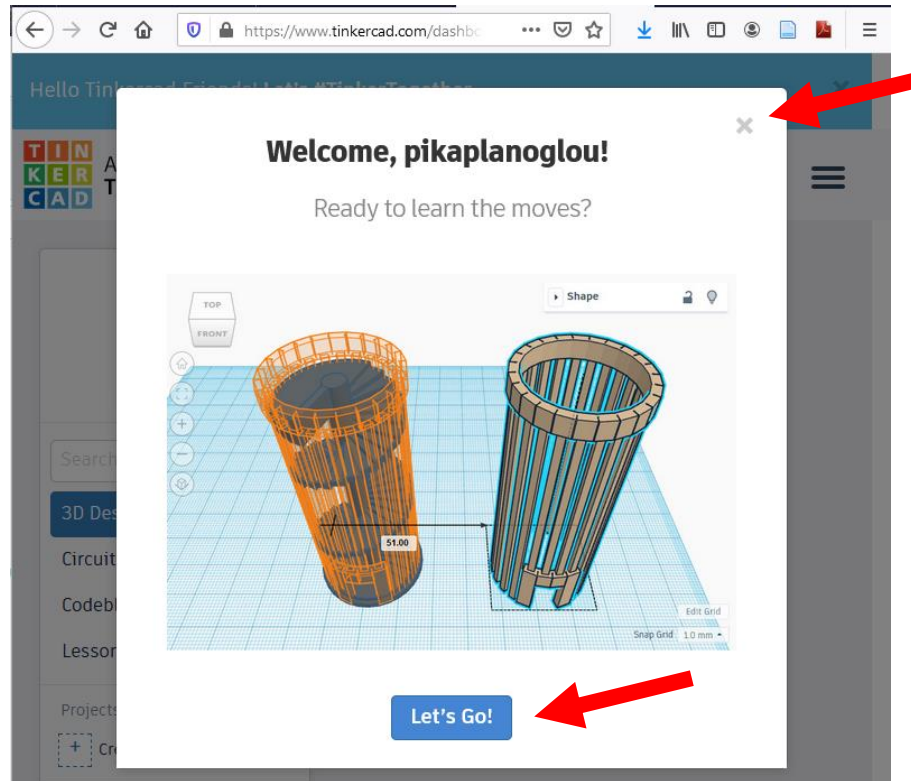
- ☐ Thank you for your interest in Autodesk. Check this box to receive electronic messages (including marketing e-mails at the address you provided) from Autodesk, including on emerging trends, events, solutions and exclusive opportunities. Autodesk will personalize the content we send you based on how you interact with our messages. You are in control. [Manage](#) your preference or [unsubscribe](#) at anytime. View Autodesk's [contact information](#) and [privacy statement](#).

DONE



# Basic Usage – Welcome Tutorial

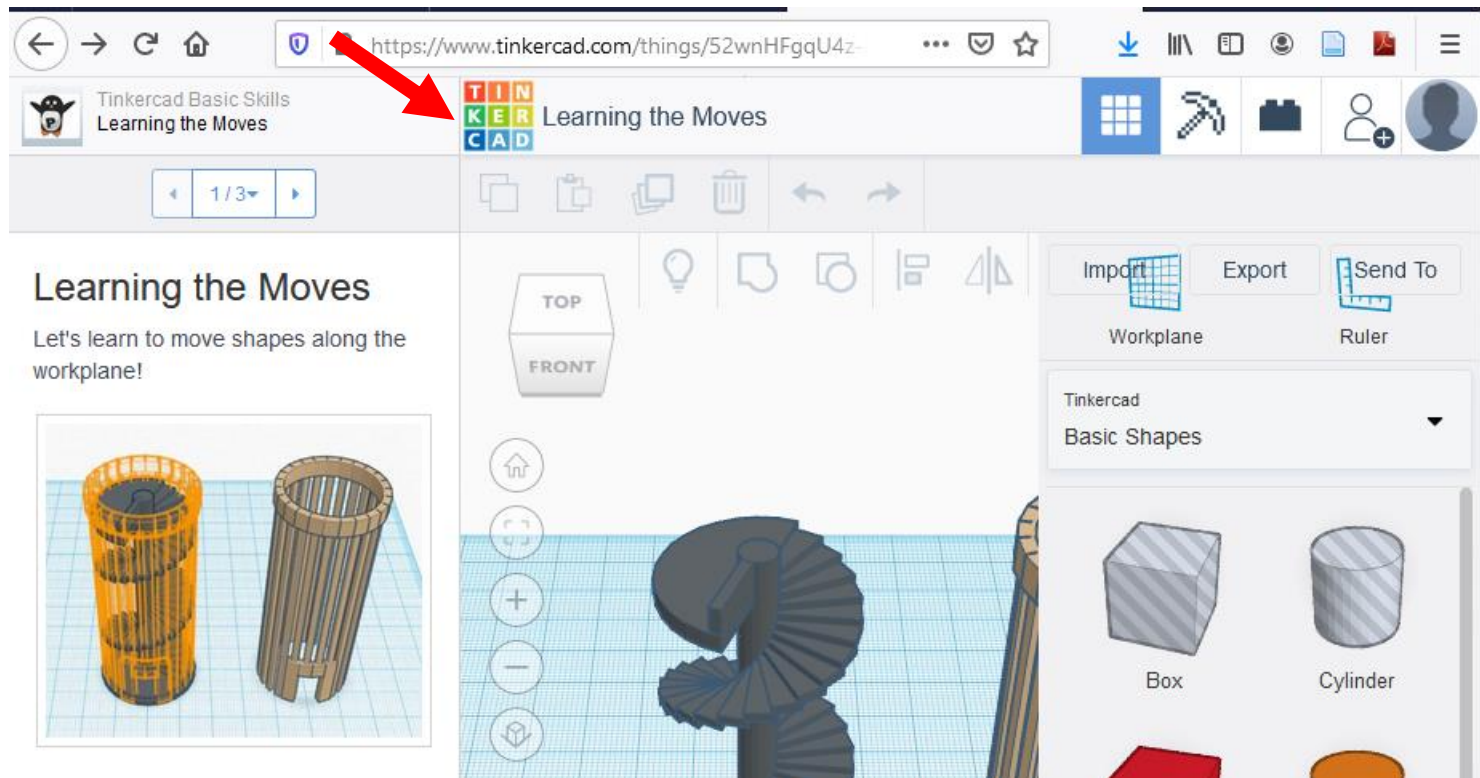
- You may follow or skip this initial tutorial on the use of Tinkercad.





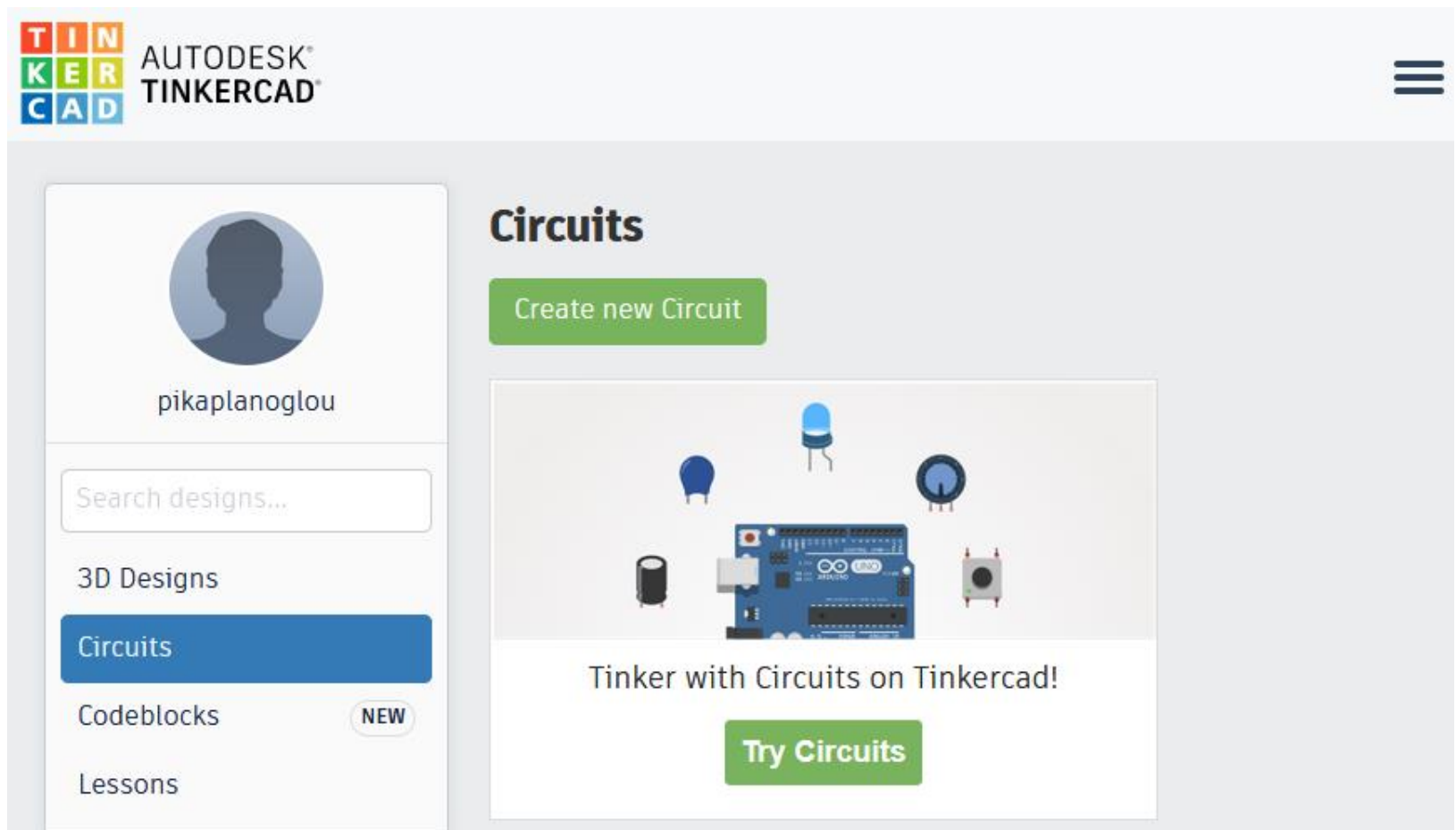
# Basic Usage – Go To Dashboard

- Click the application logo on any page to return to the dashboard.



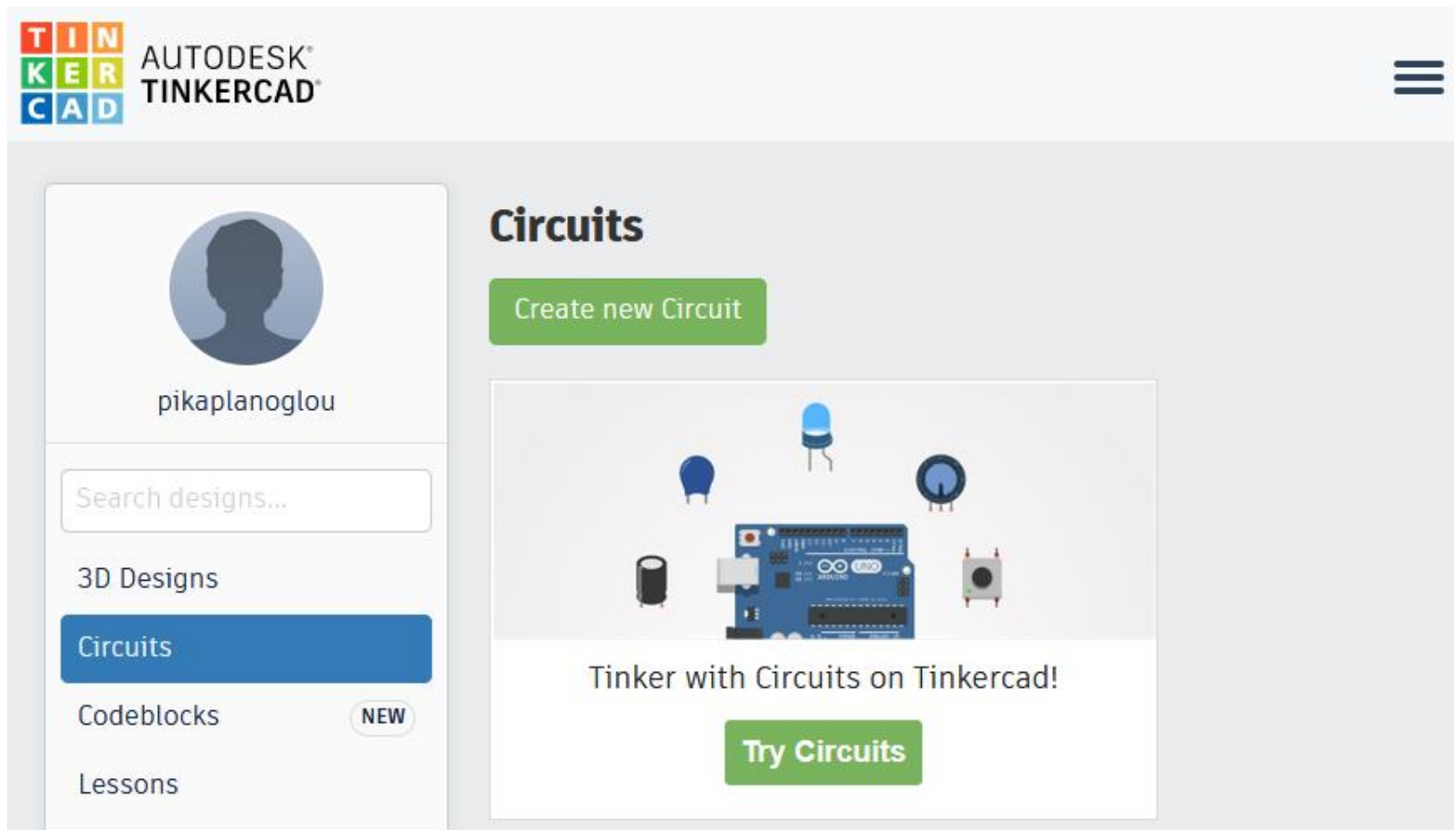
# Basic Usage – Create new Circuit

- From the dashboard click on **Circuits** and then **Create new circuit**.



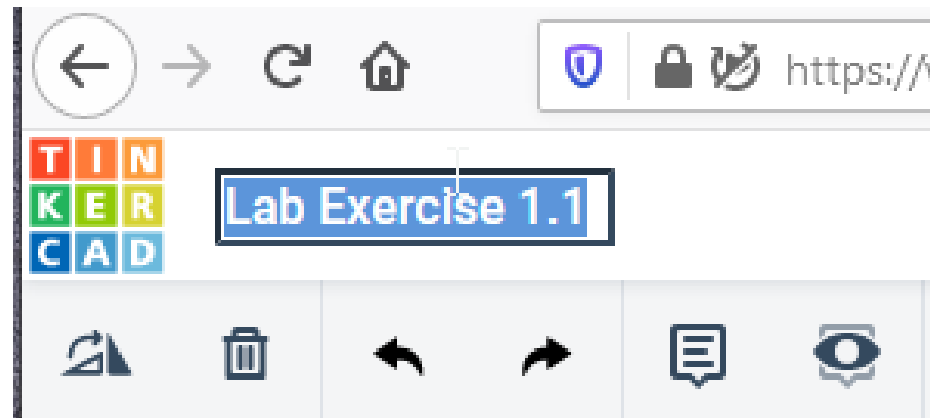
# Basic Usage – Create new Circuit

- From the dashboard click on **Circuits** and then **Create new circuit**.



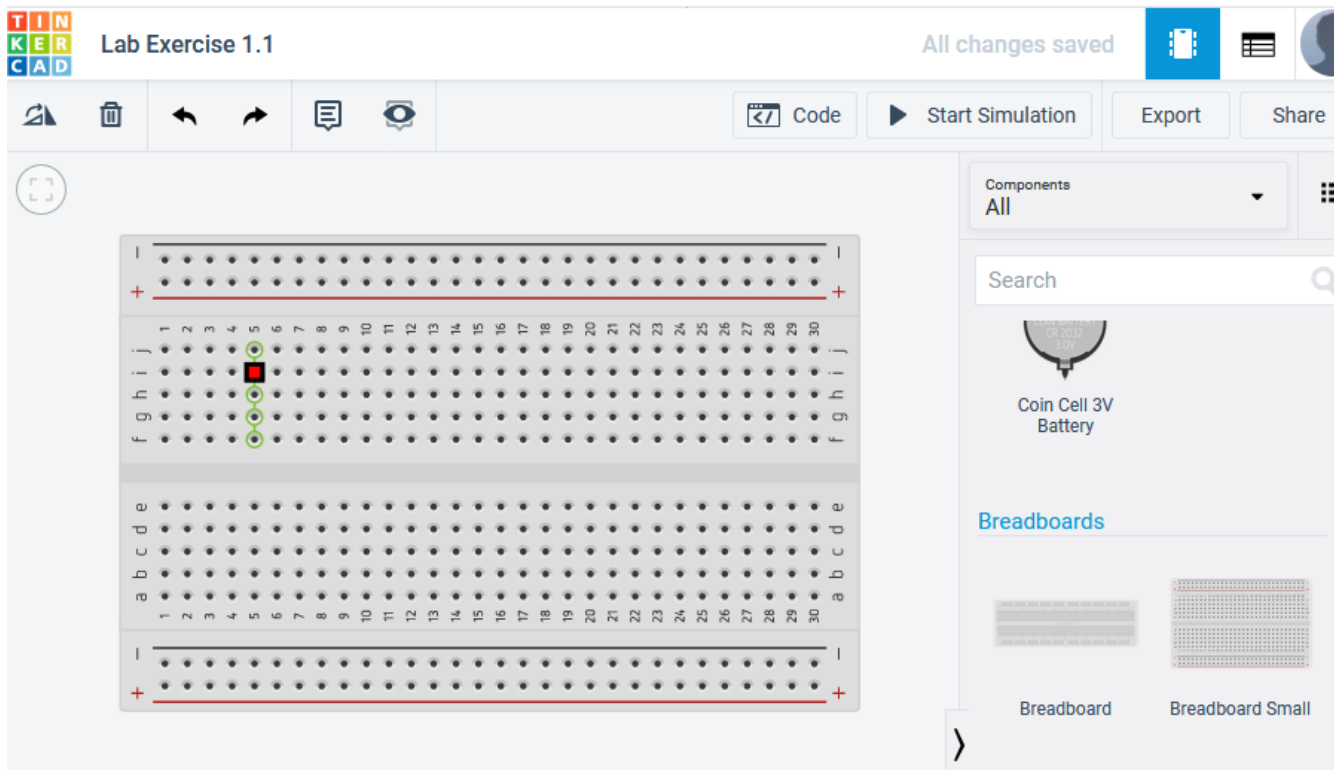
# Exercise: Name your Circuit (1/7)

- Rename your circuit by clicking on its name. Give the proper name depending on the exercise you are asked to perform, e.g. Lab Exercise 1.1.



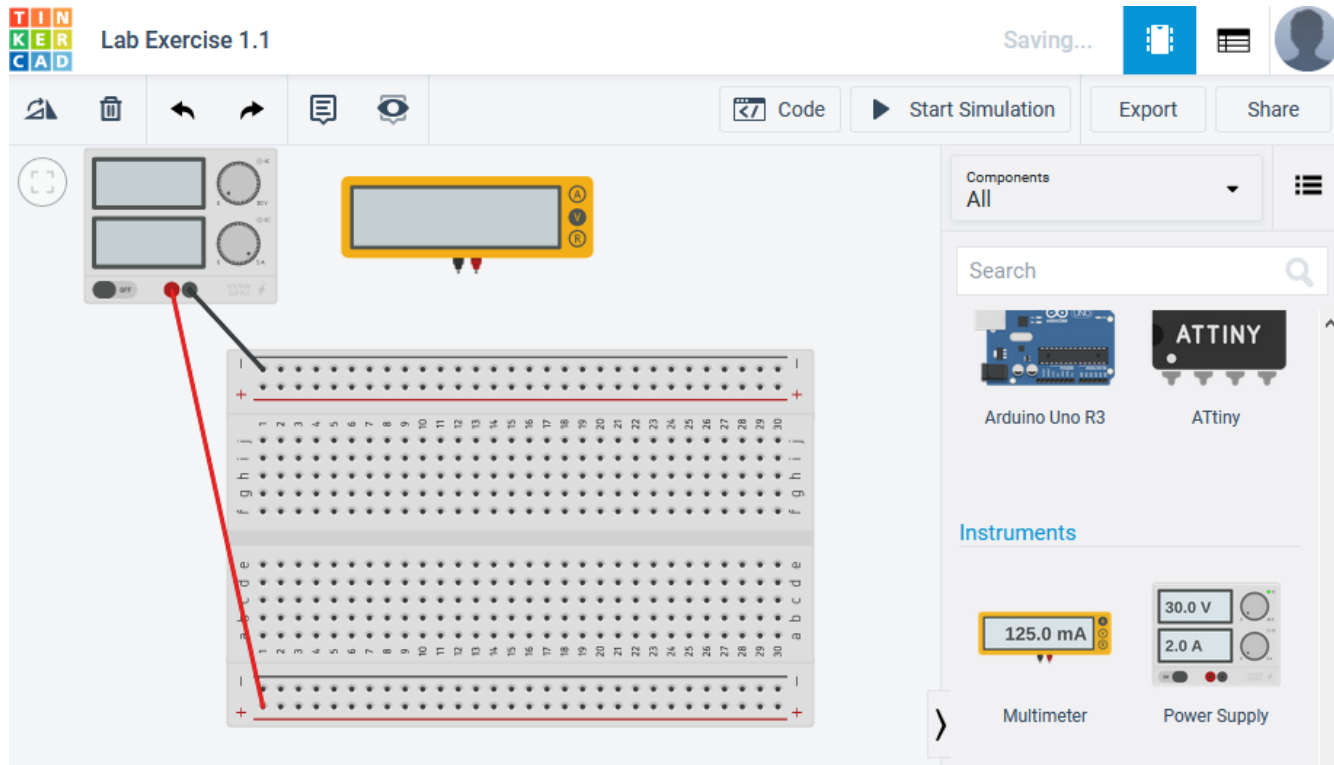
# Exercise: Adding a raster (2/7).

- Choose to view “All” components. Scroll to Breadboards and add a “Breadboard Small”. You can zoom in/out using the mouse wheel.



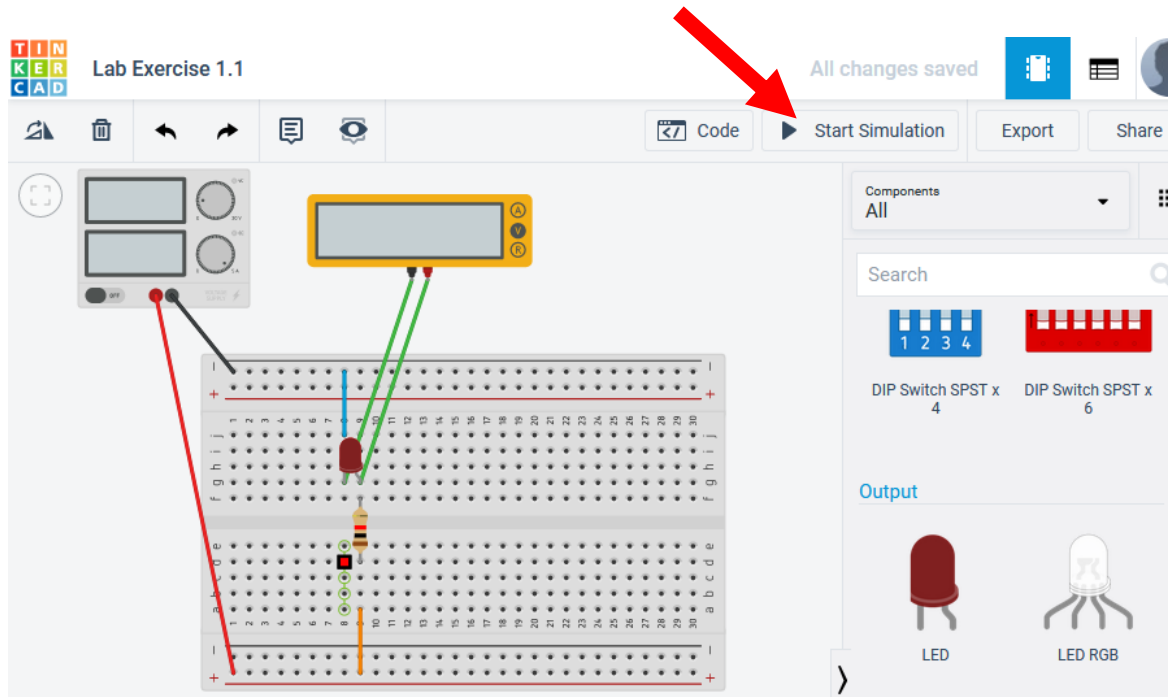
# Exercise: Adding instruments (3/7).

- Scroll to Instruments and add a “Multimeter and a Power Supply” connect the power supply to the breadboard.



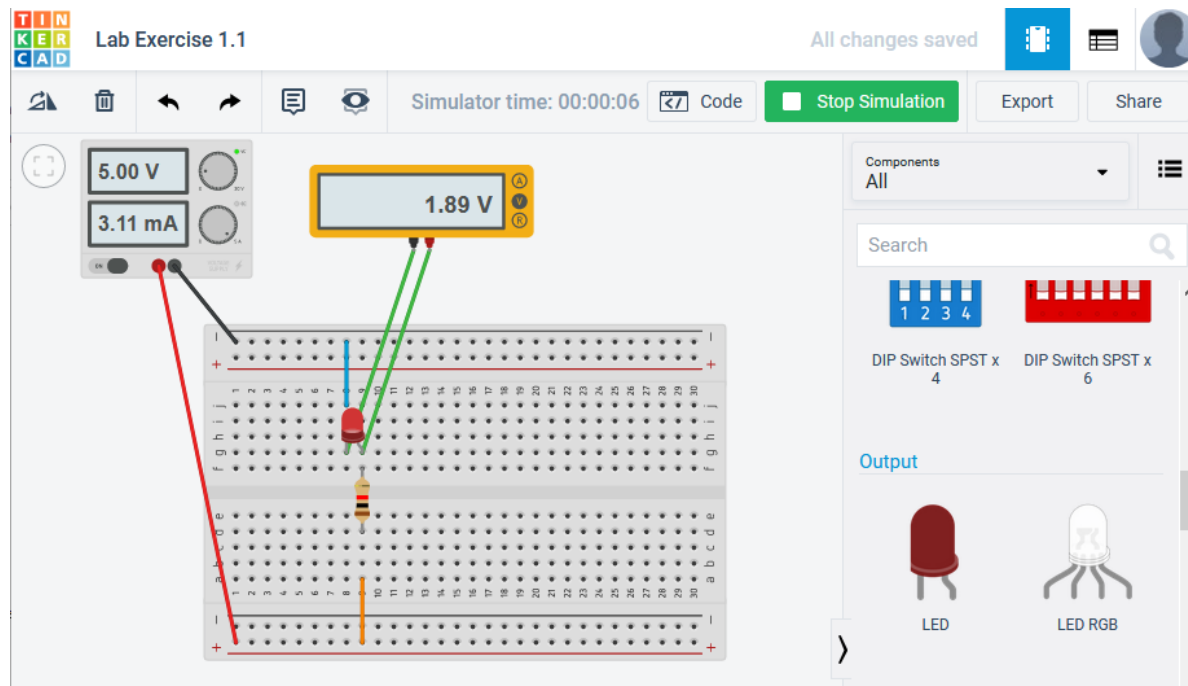
# Exercise: Creating a simple circuit (4/7)

- Complete your circuit, connect your multimeter and press Start Simulation to record your measurements.



# Exercise: Running the simulation (5/7)

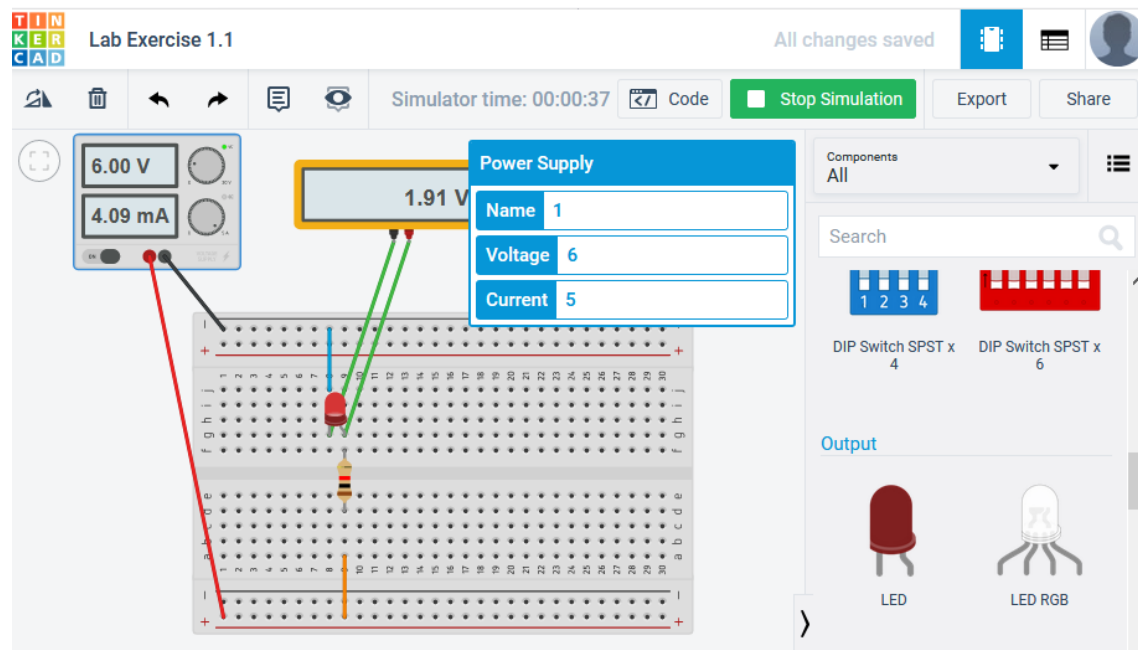
- When the simulation is running you will get a reading on the multimeter.





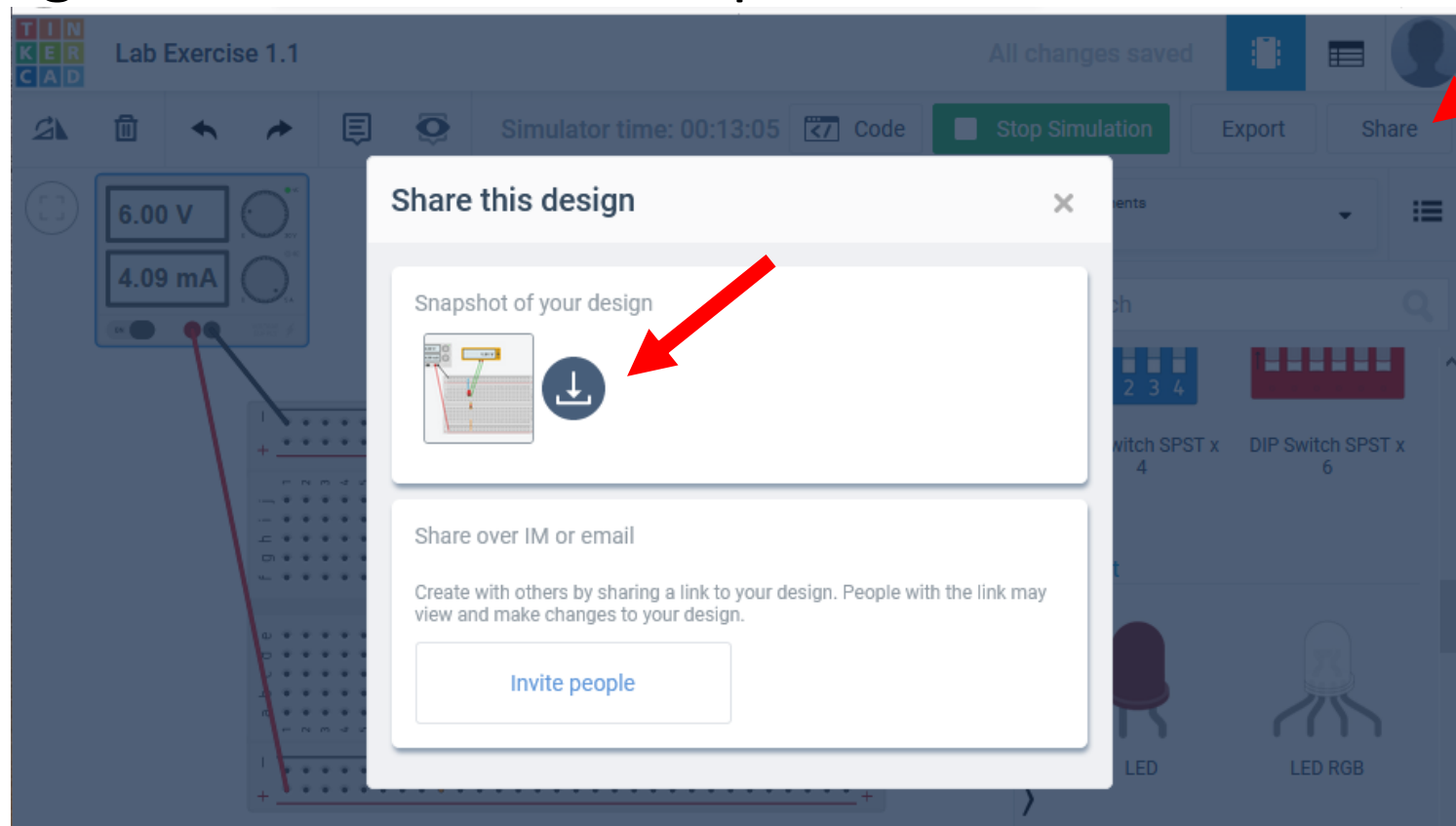
# Exercise: Modify settings while running simulation (6/7).

- During simulation you may change the power supply Voltage by typing the new value, e.g. 6 V.
- As you see the reading on the multimeter changes.



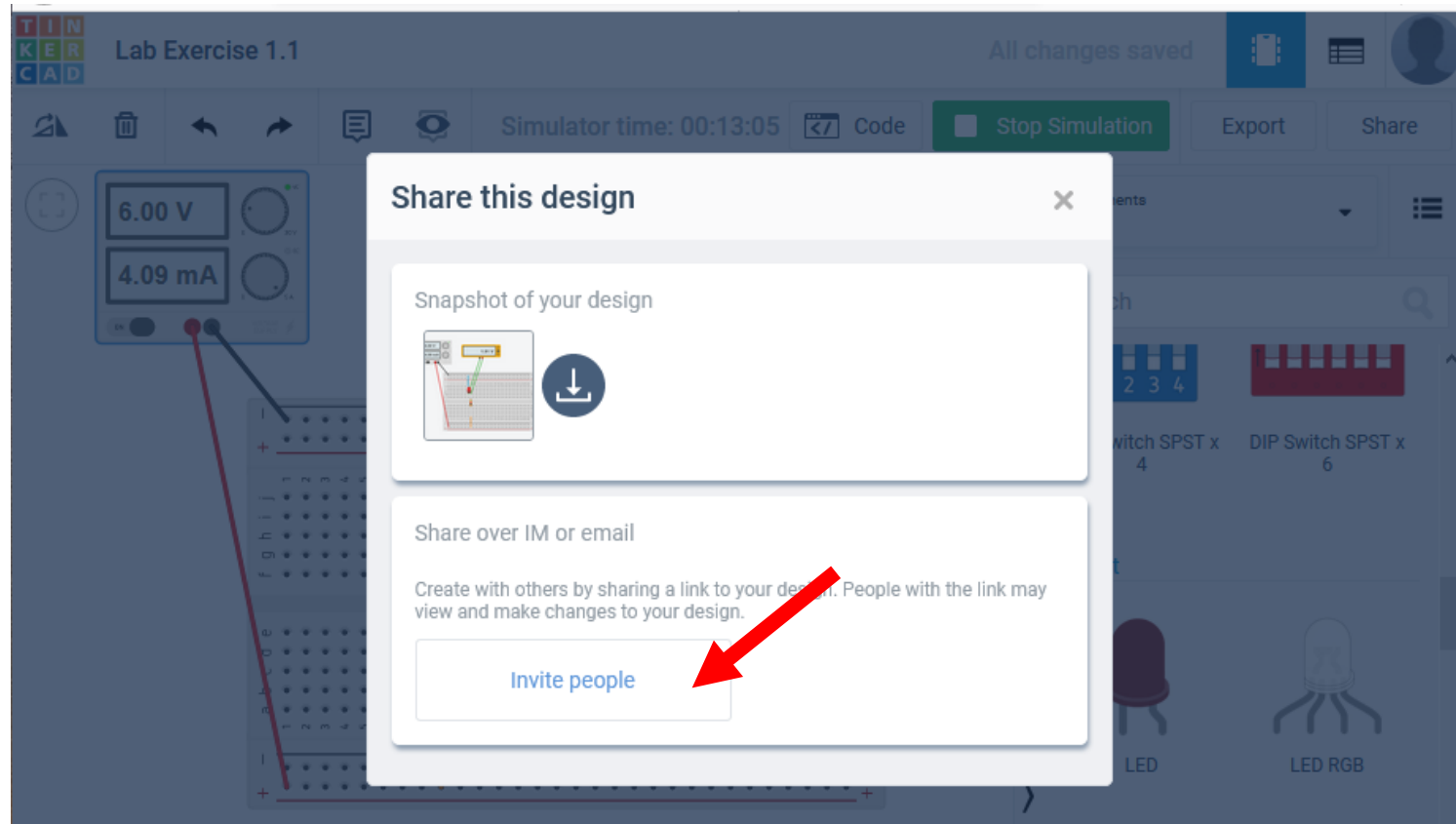
# Exercise: Making a snapshot of your design (7/7).

- When you are asked to do so, get a snapshot of your design, save it to disk and upload it on Moodle.



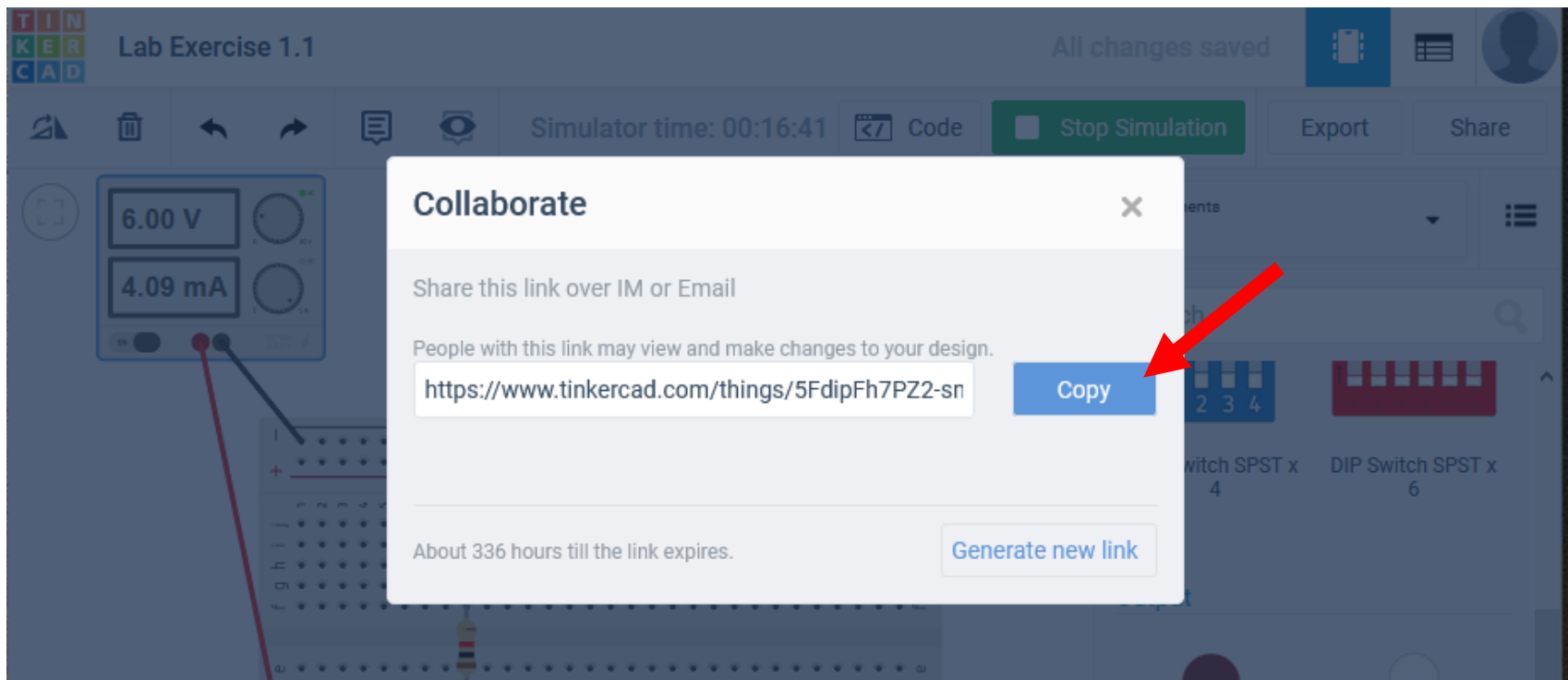
# Sharing your design with the teacher (1/2)

- The teacher can see your design and help you if you click “Invite people” and then ...



# Sharing your design with the teacher (1/2)

- ... copy-paste the permalink in the proper place, that will be pointed out by the teacher.





See you at our virtual lab sessions!