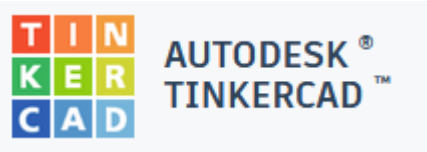


Tinkercad

Basic Usage Instructions

1204 Digital Circuits Design Lab

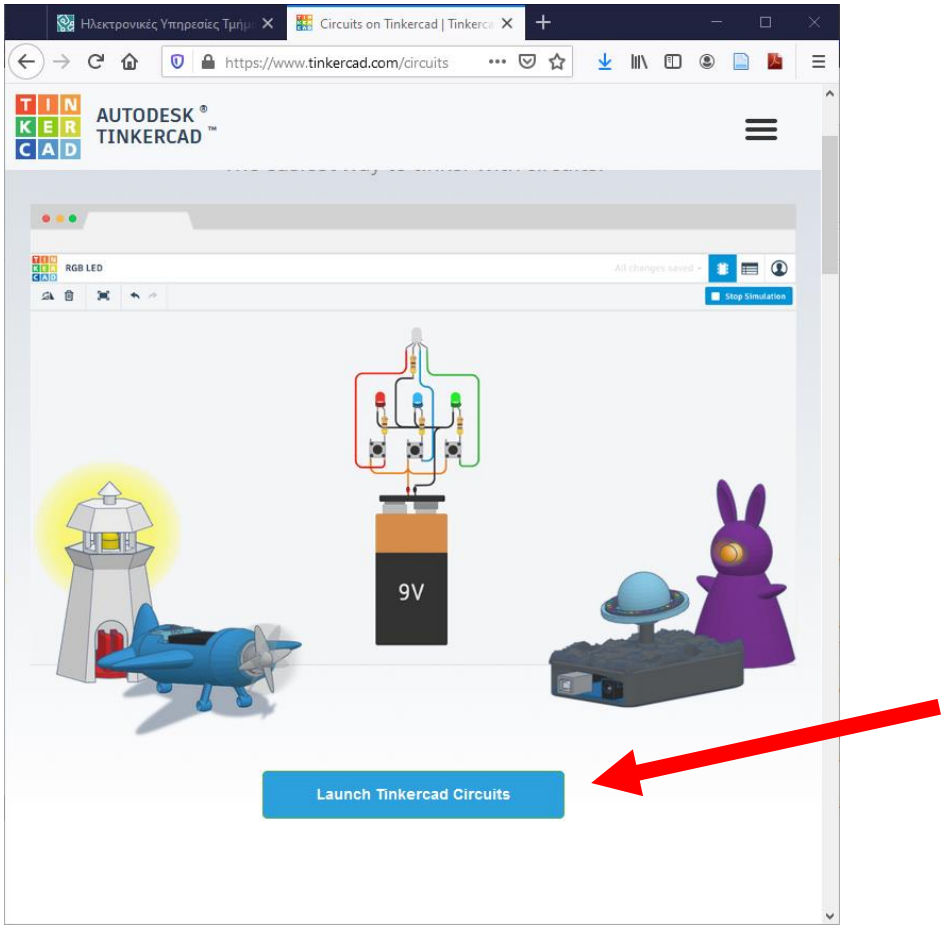
Lecturer: Pantelis I. Kaplanoglou

Department of Information and Electronic Engineering

International Hellenic University

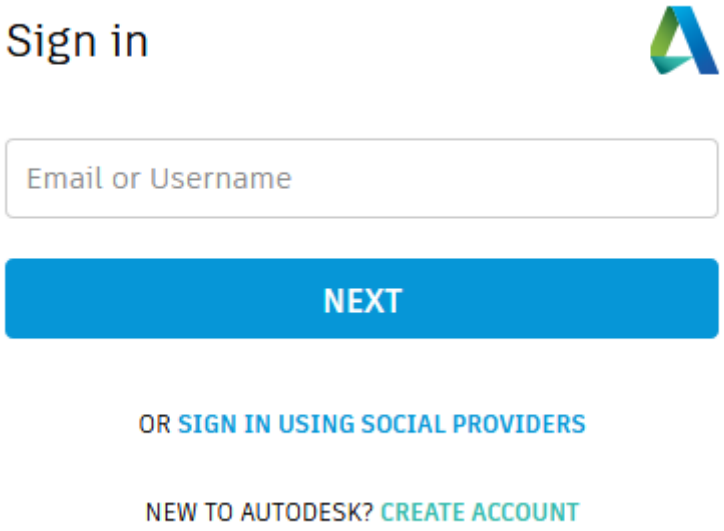
Step 1: Connect to Website

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

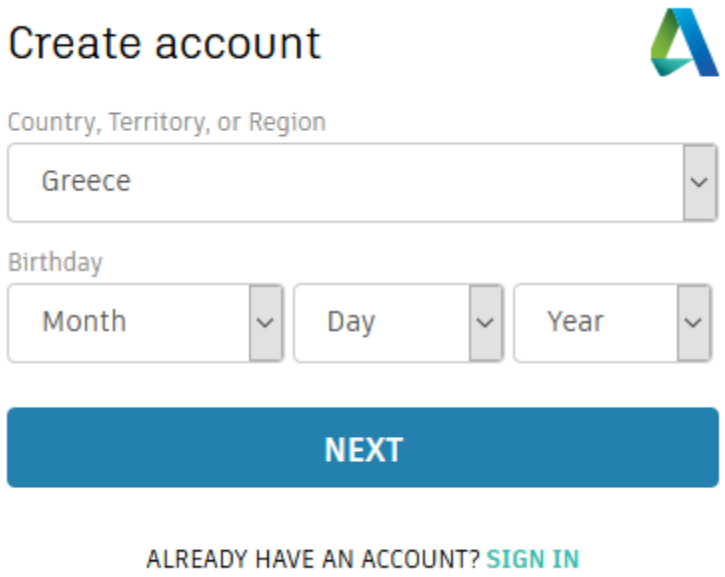


Step 2: Create Account / Sign In

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

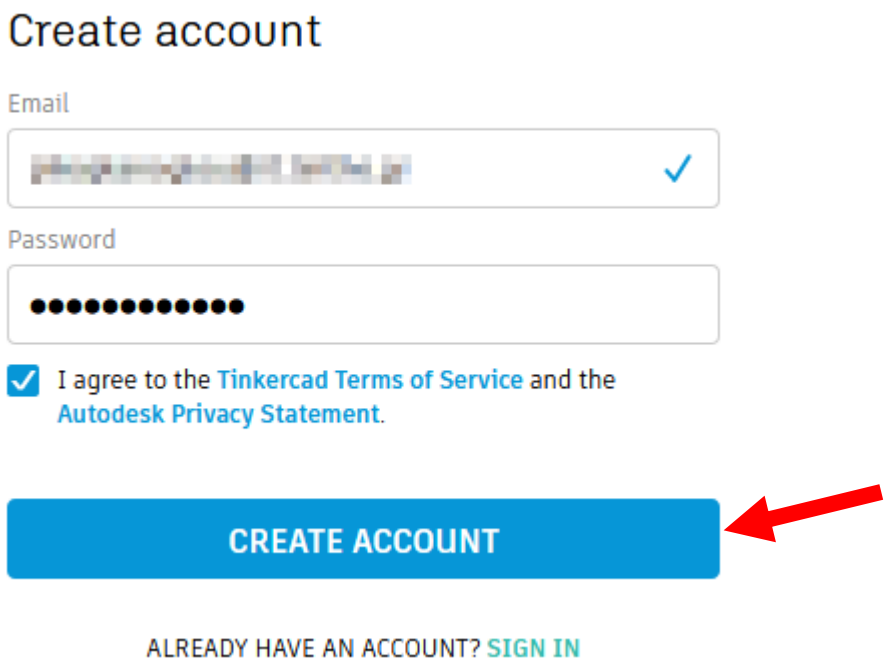


Step 2: Create Account 1/4



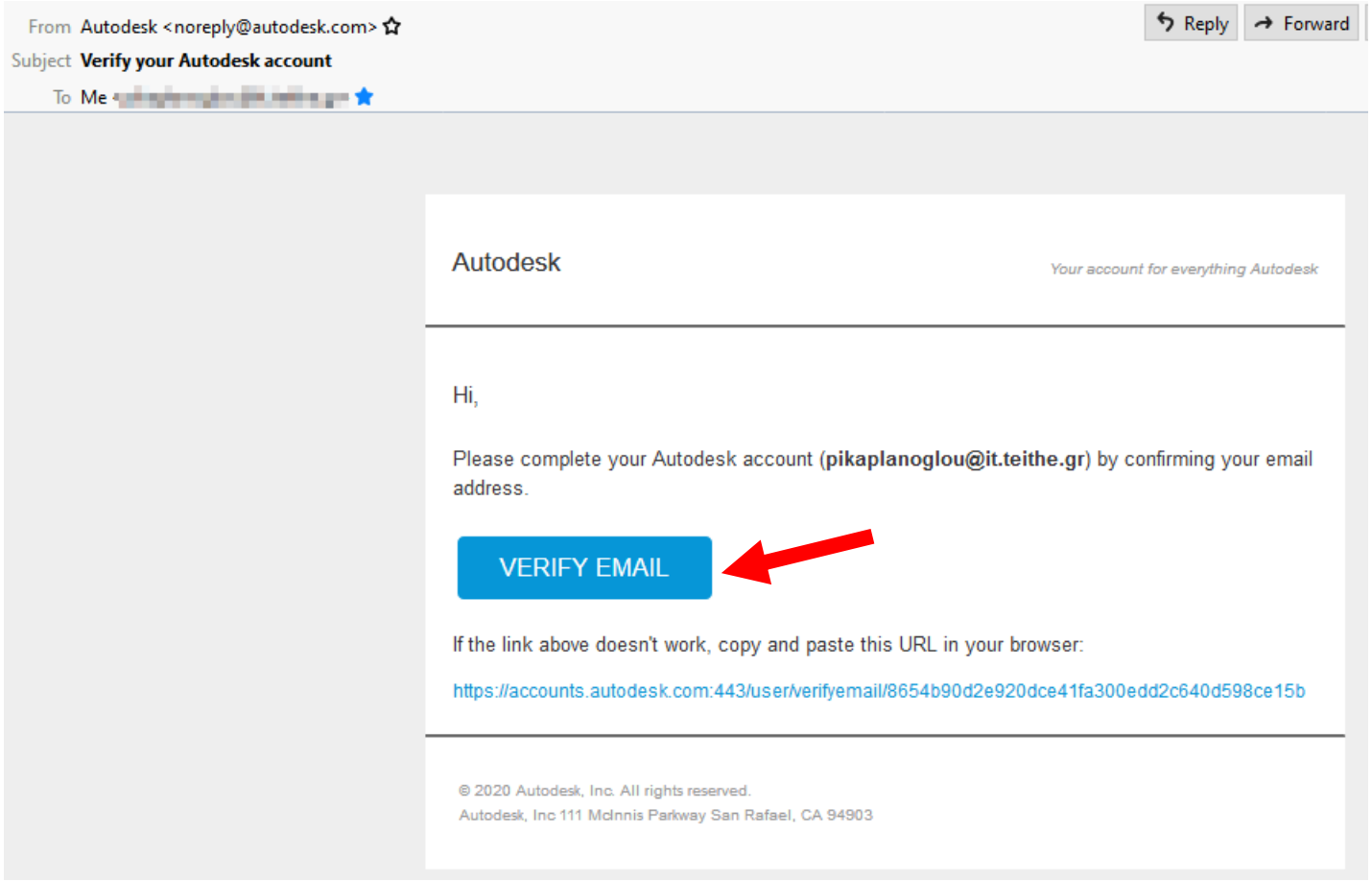
Step 2: Create Account 2/4

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

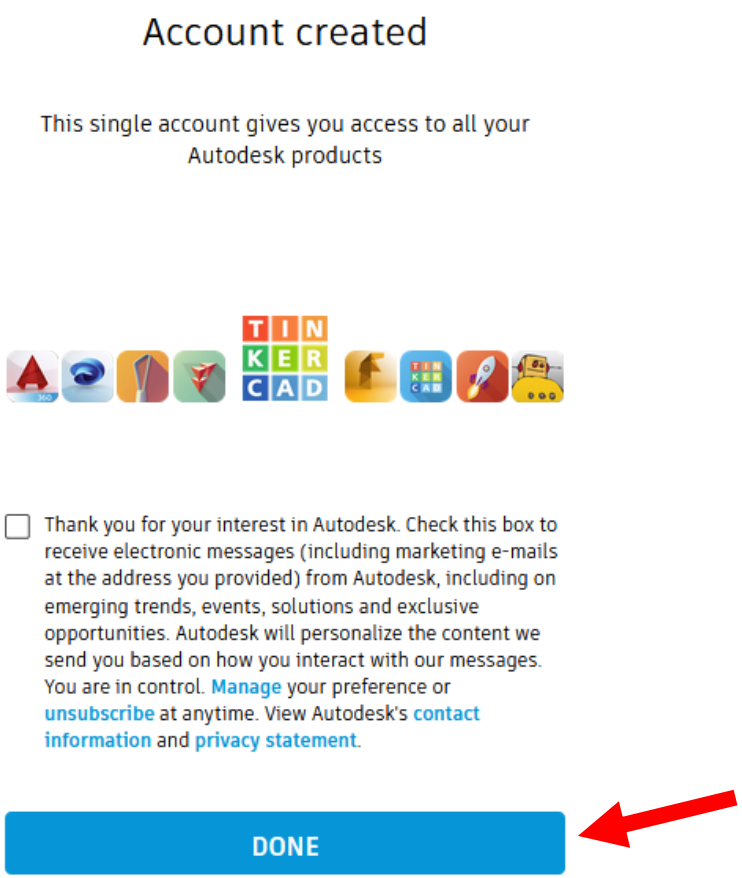


Step 2: Create Account 3/4

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

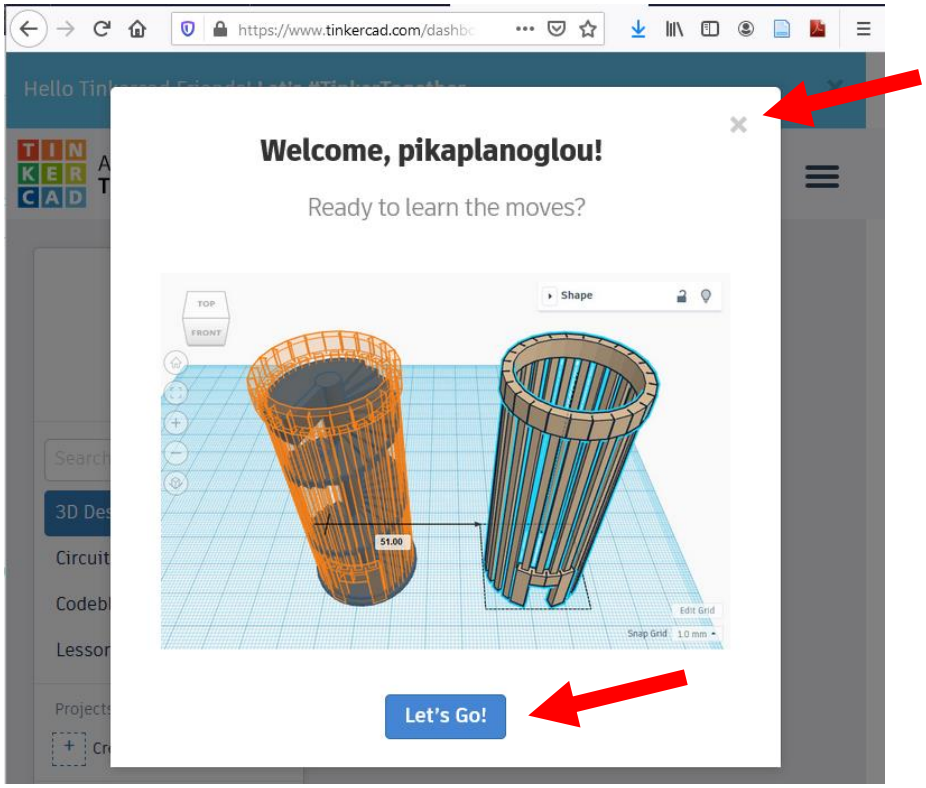


Step 2: Create Account 4/4



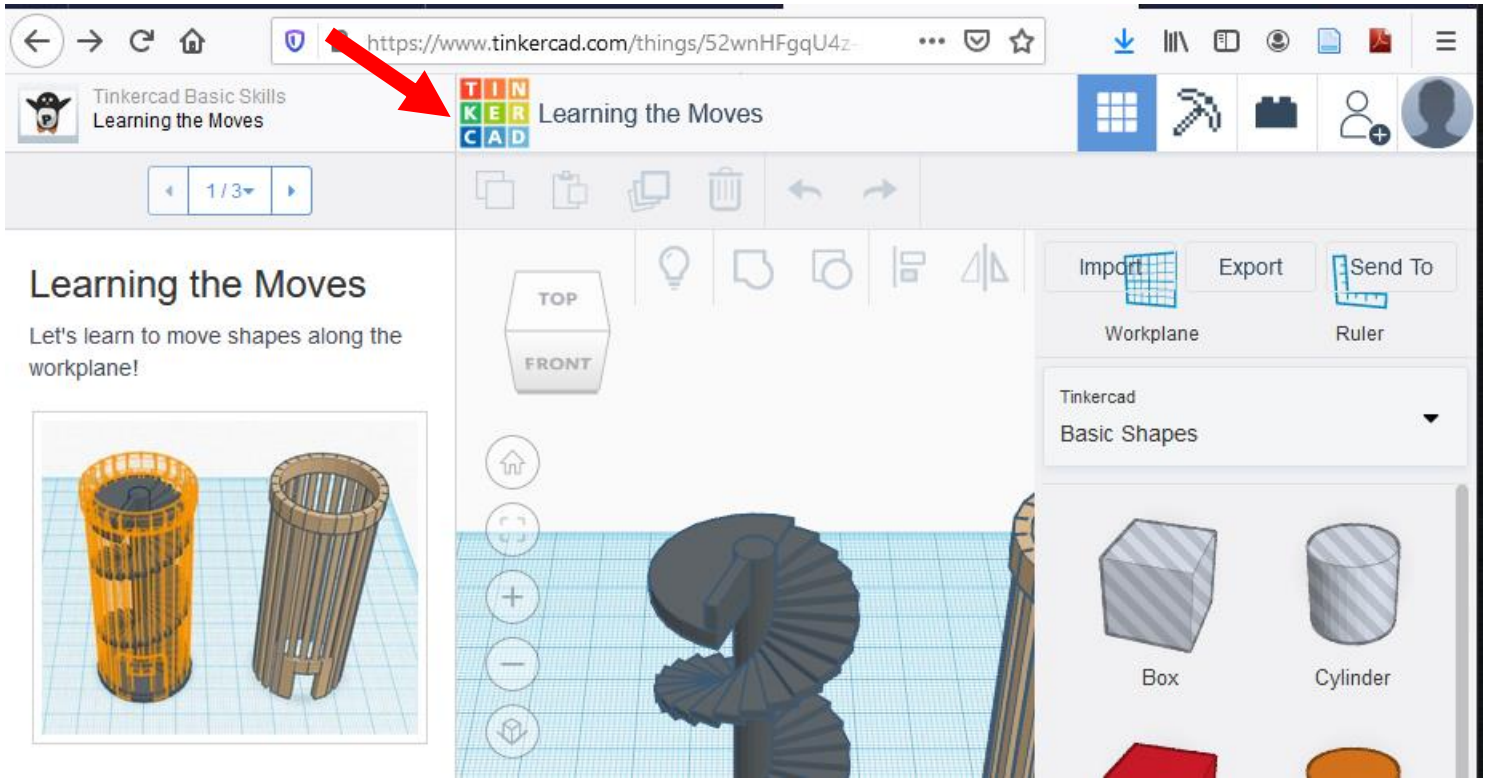
Basic Usage – Welcome Tutorial

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



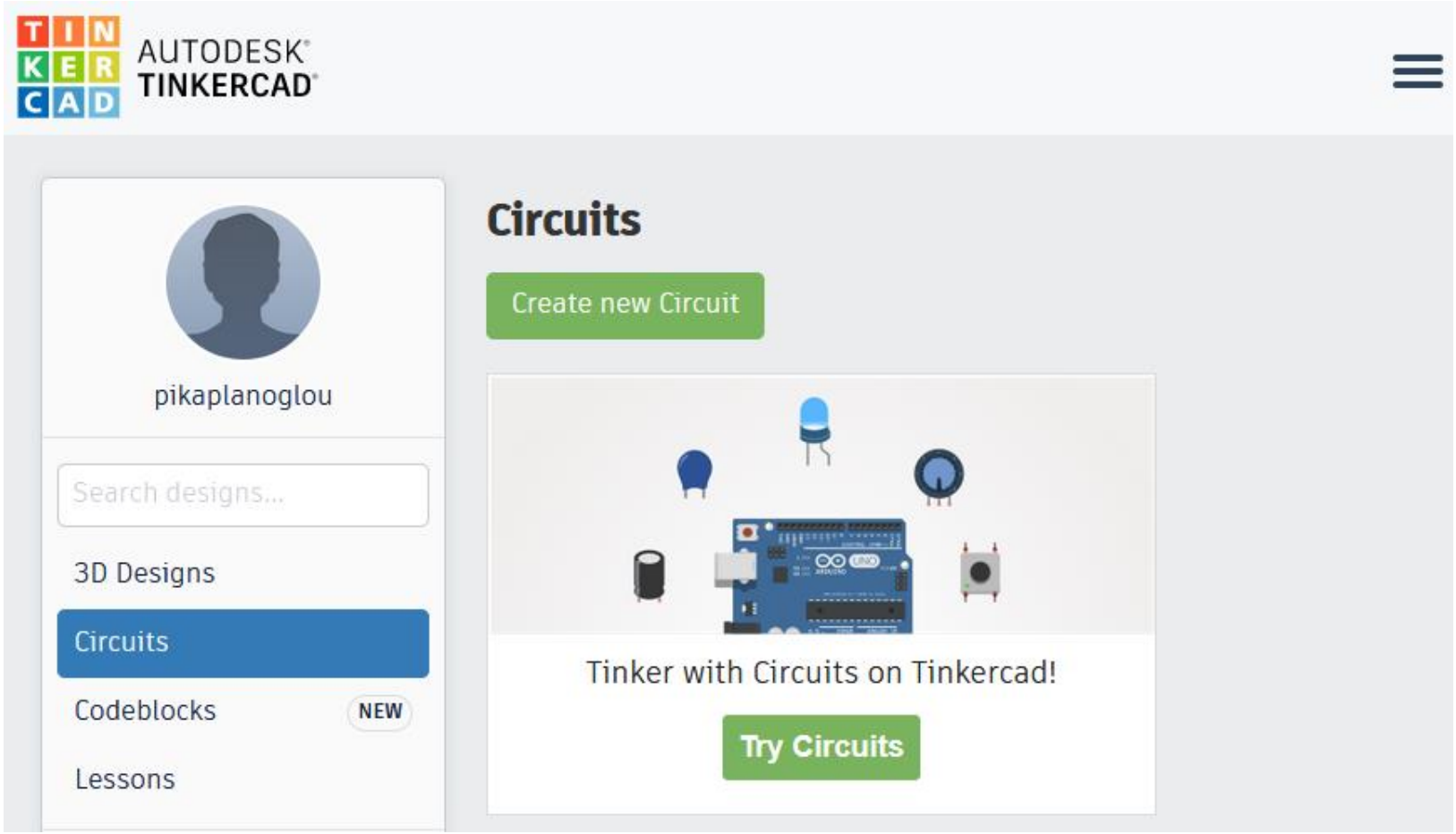
Basic Usage – Go To Dashboard

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



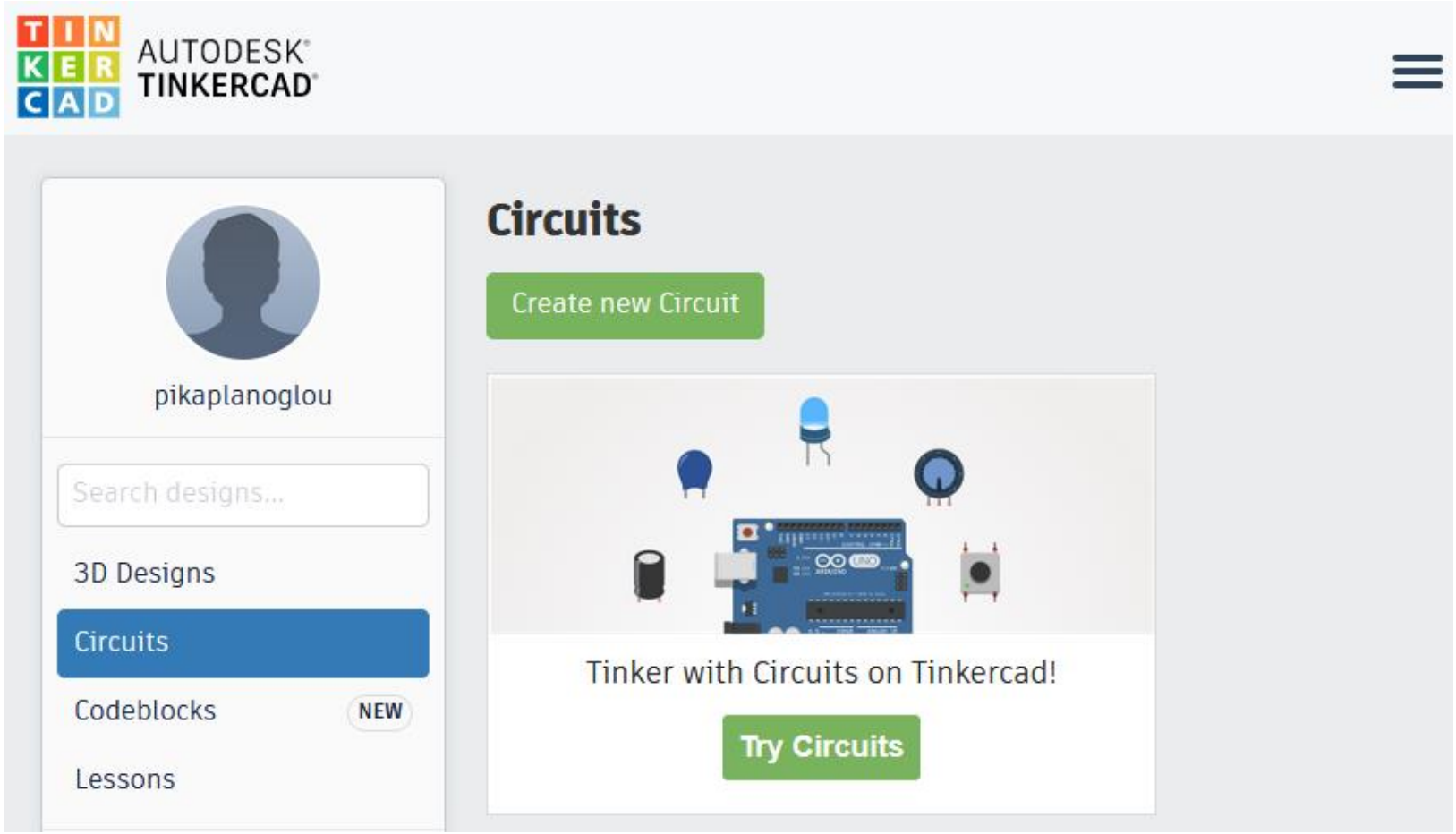
Basic Usage – Create new Circuit

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



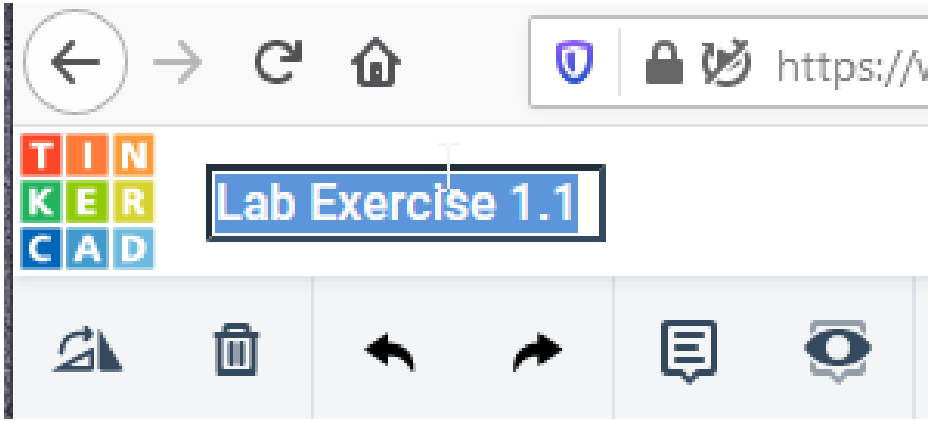
Basic Usage – Create new Circuit

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



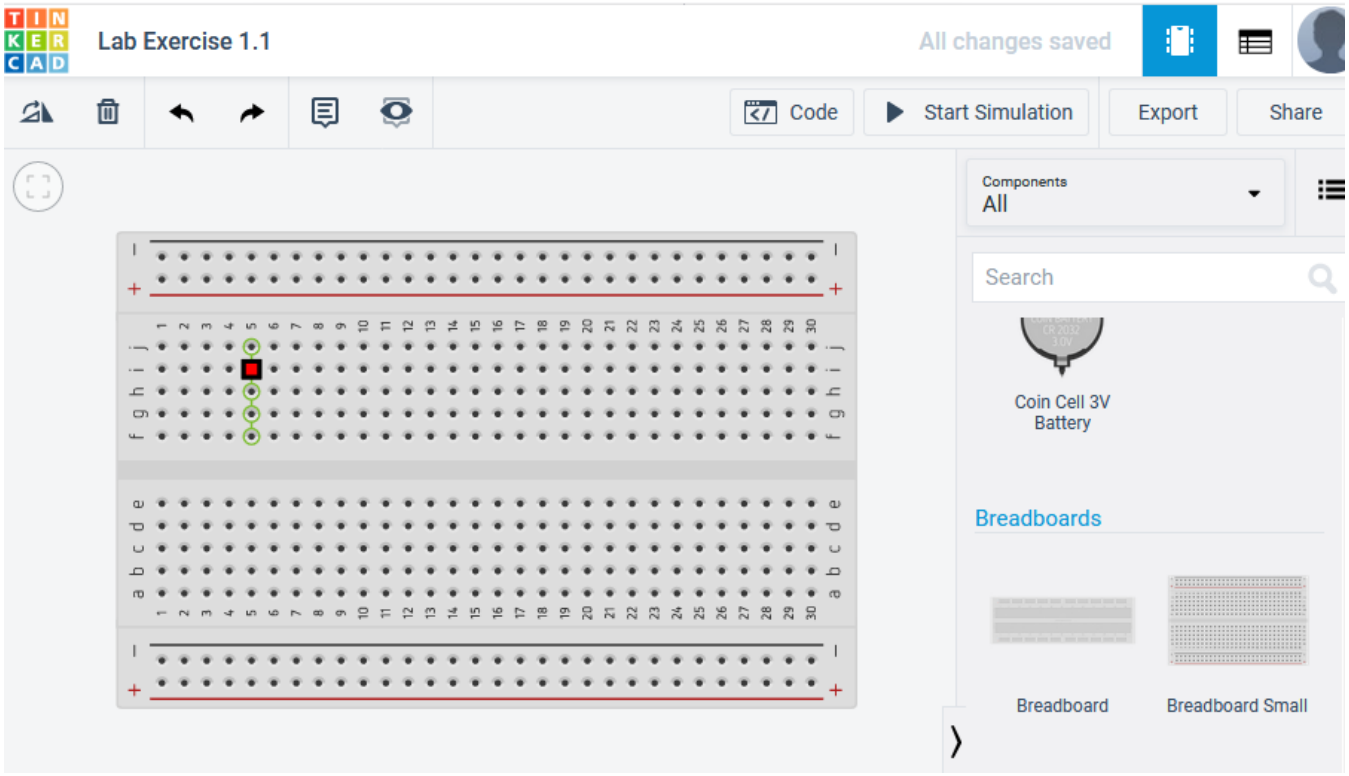
Exercise: Name your Circuit (1/7)

- 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.



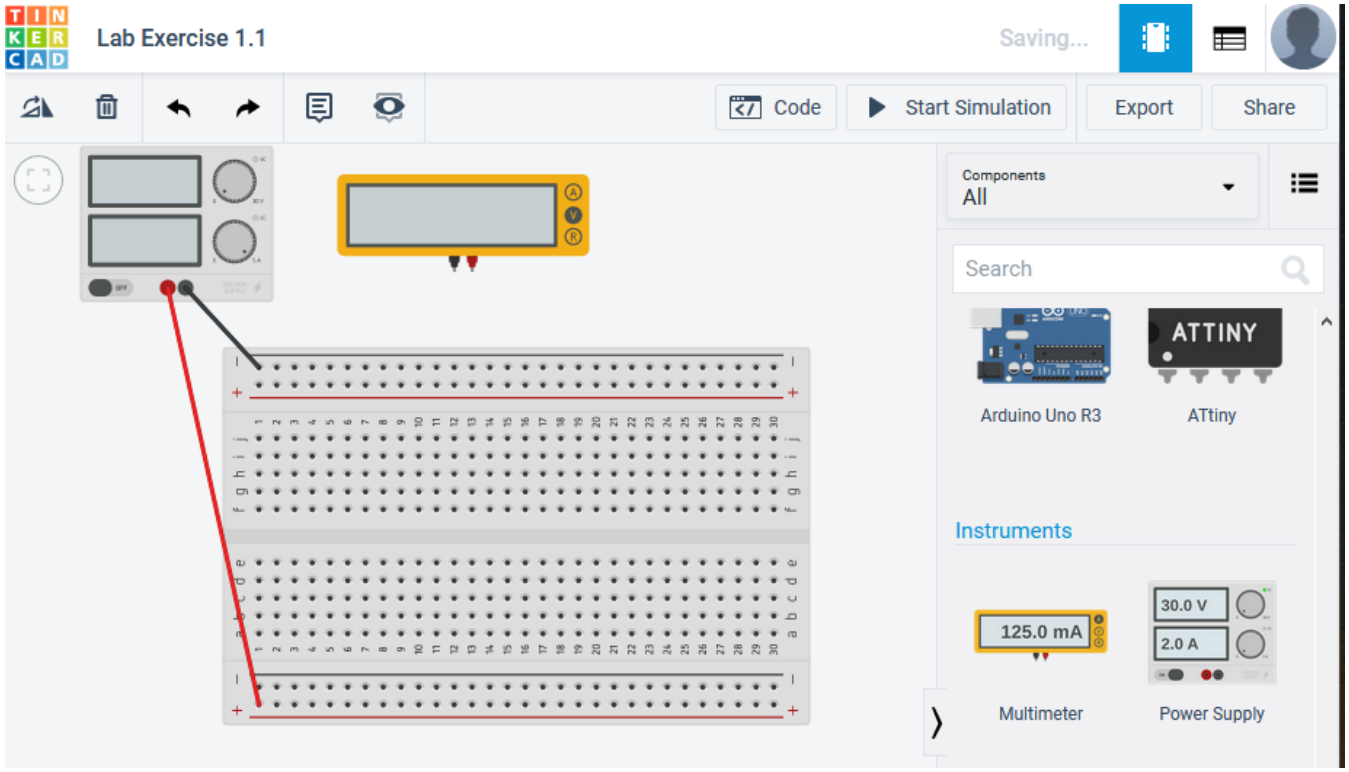
Exercise: Adding a raster (2/7).

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



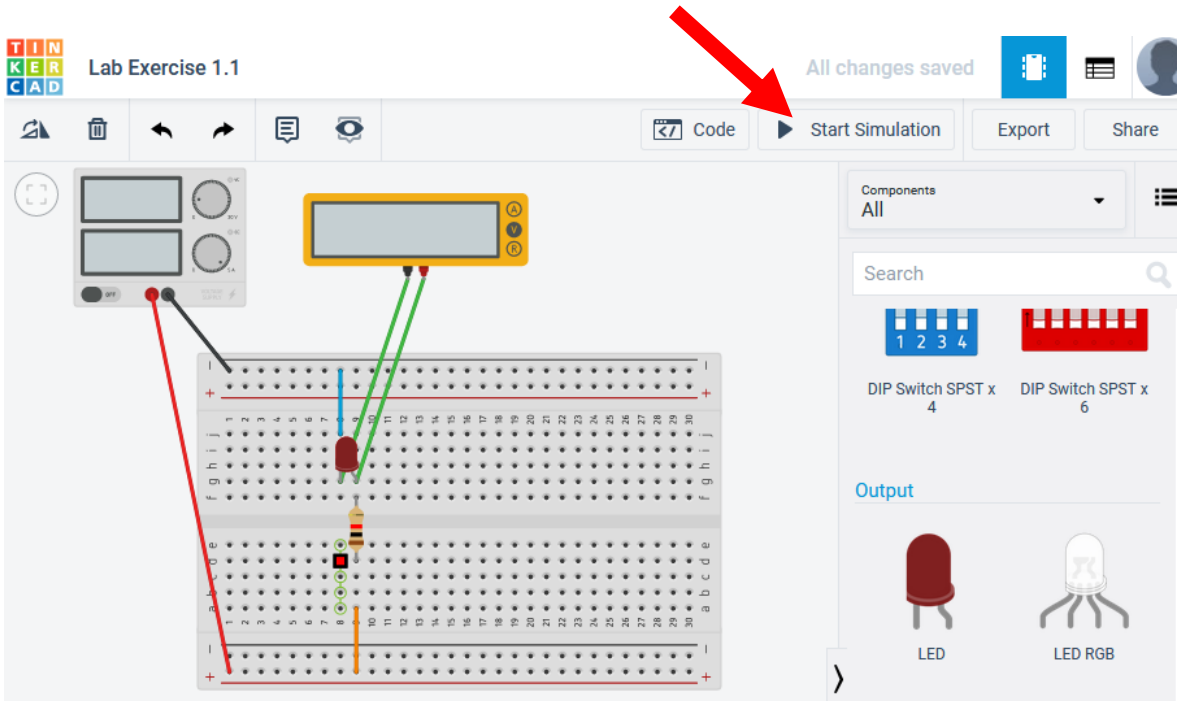
Exercise: Adding instruments (3/7).

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



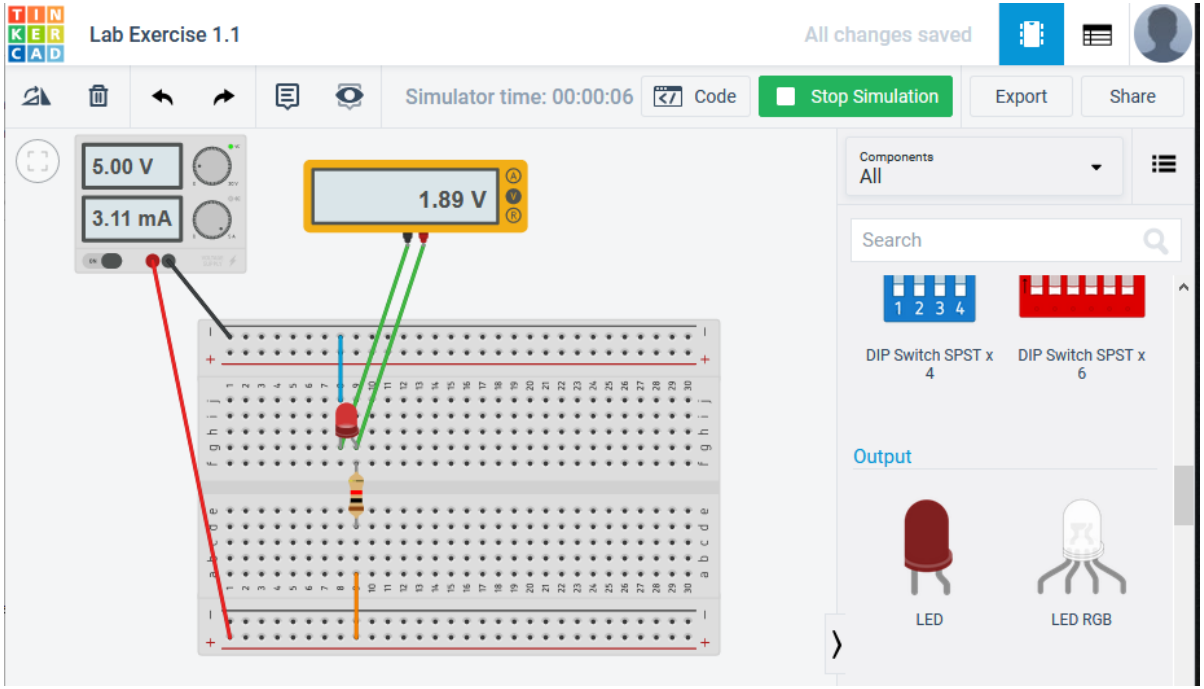
Exercise: Creating a simple circuit (4/7)

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



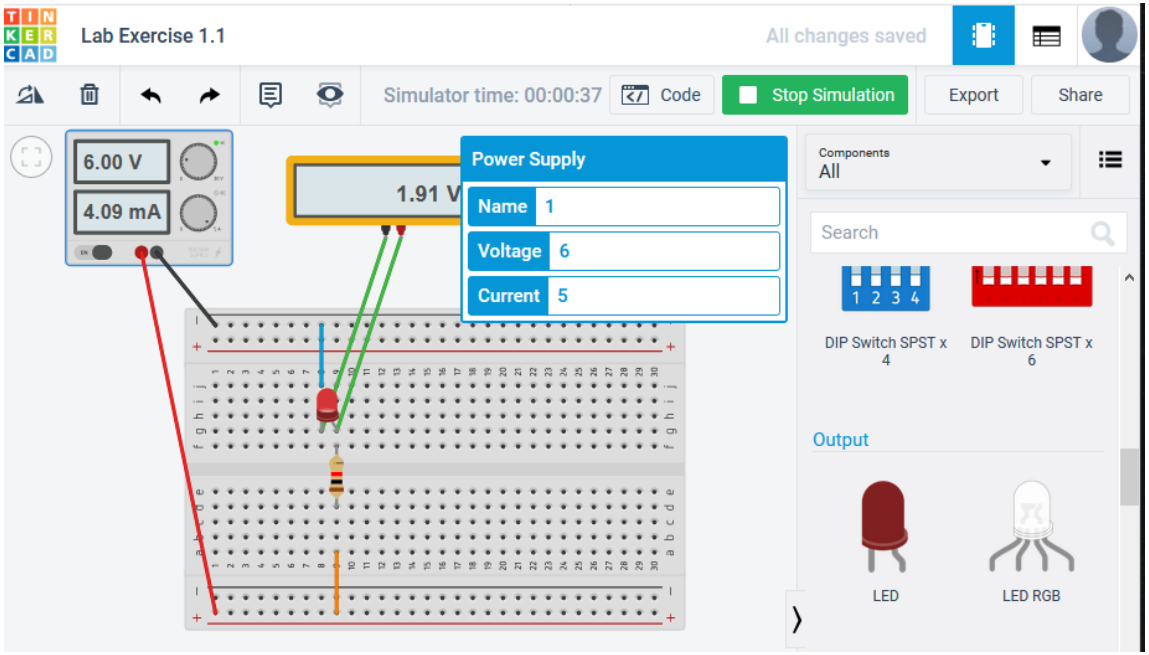
Exercise: Running the simulation (5/7)

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



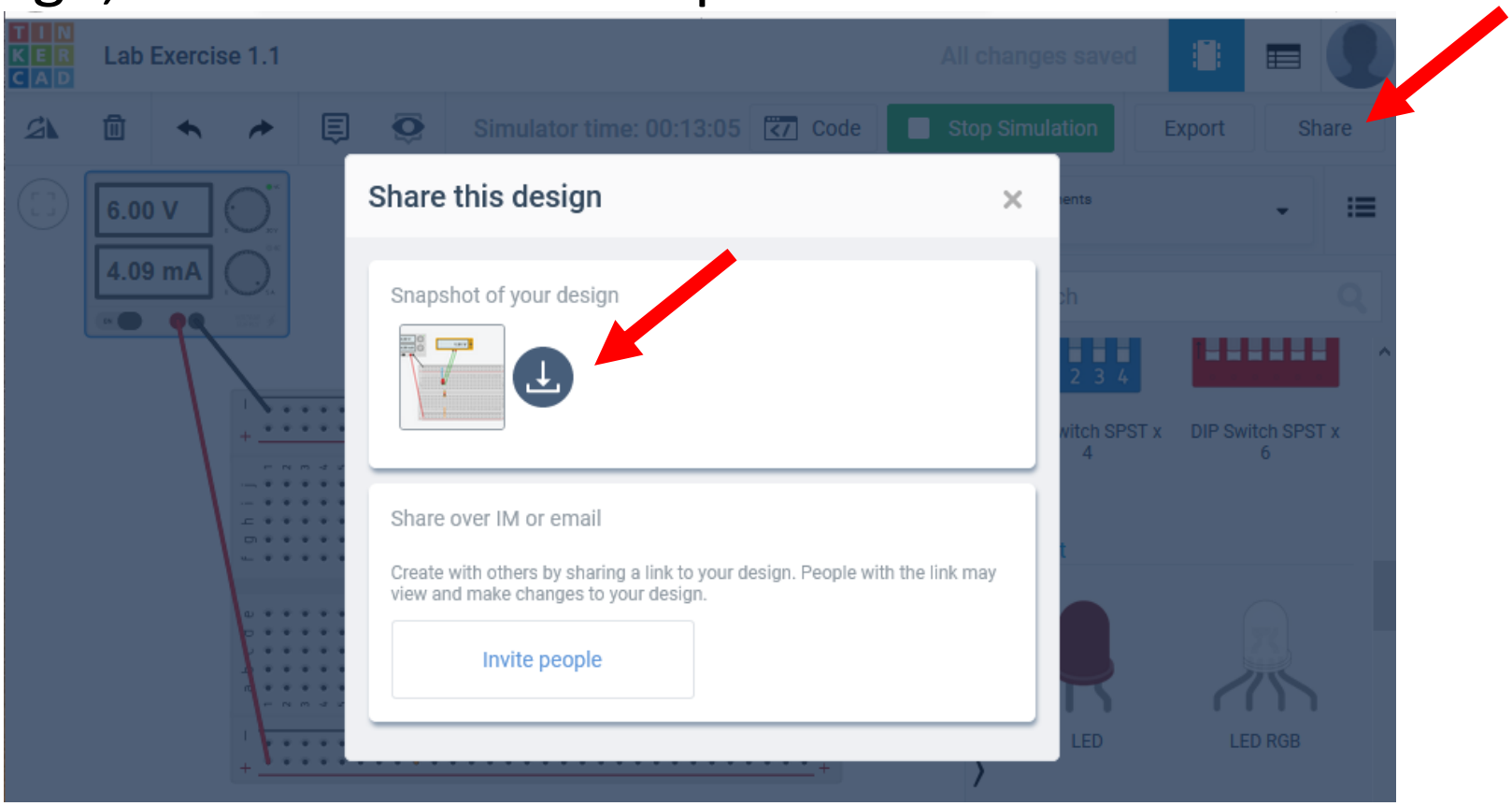
Exercise: Modify settings while running simulation (6/7).

- 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.



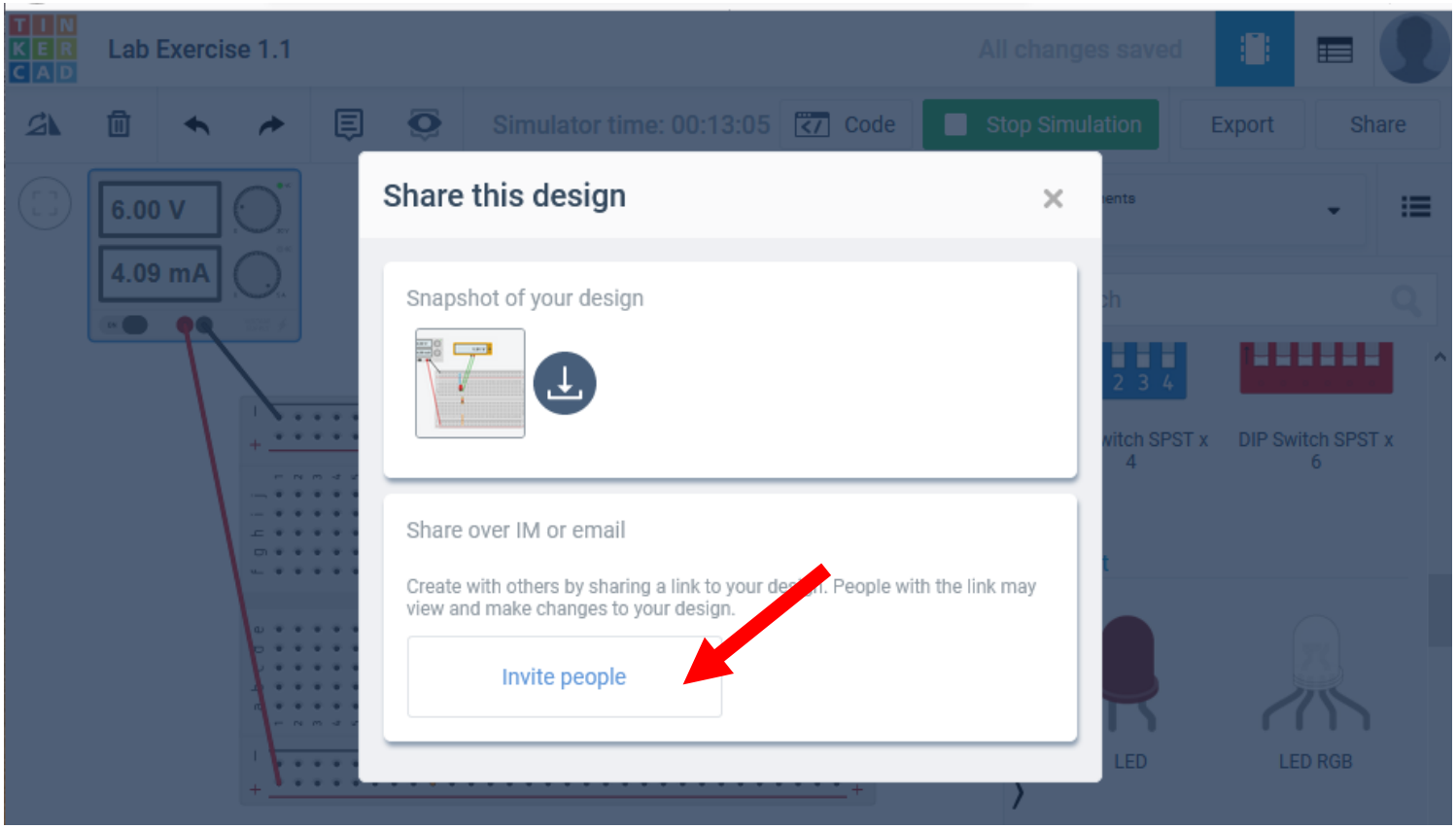
Exercise: Making a snapshot of your design (7/7).

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



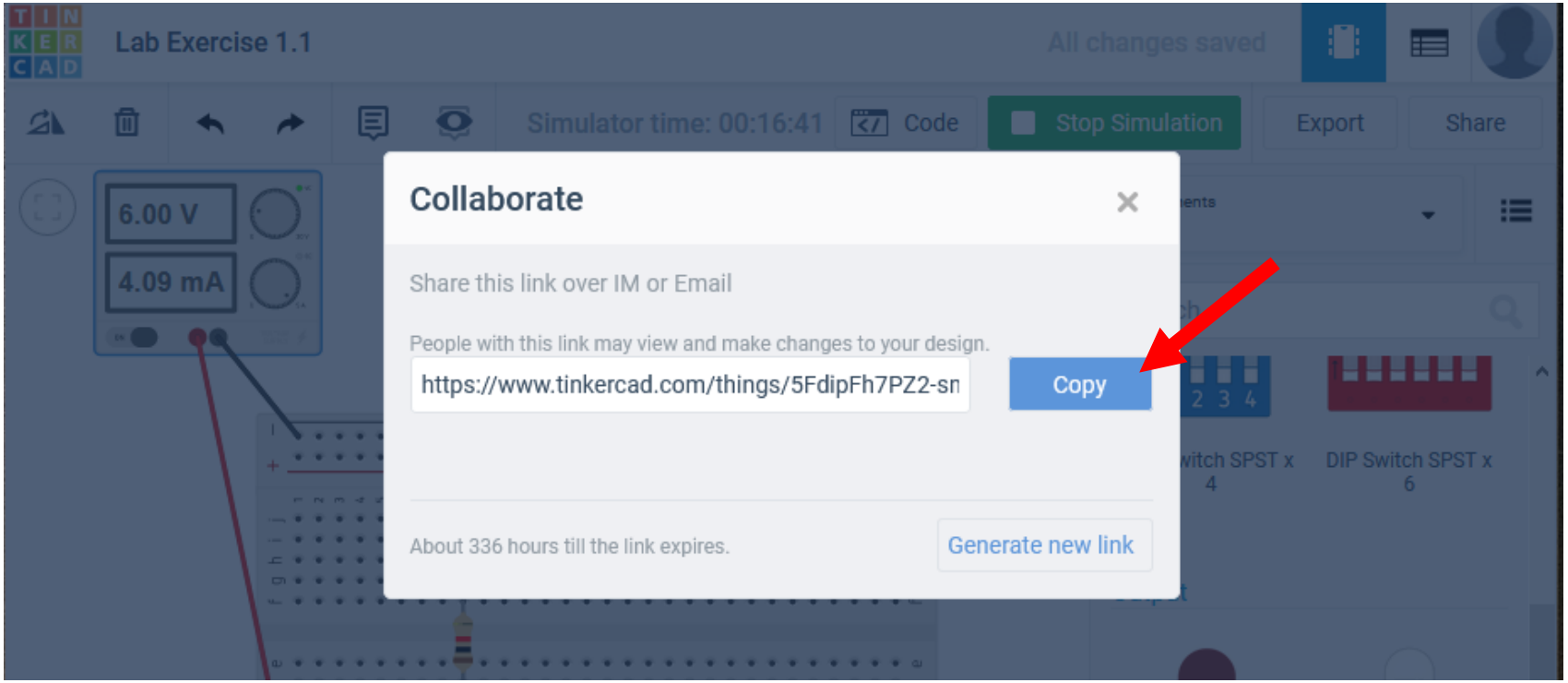
Sharing your design with the teacher (1/2)

- 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.



IHU

See you at our virtual lab sessions!