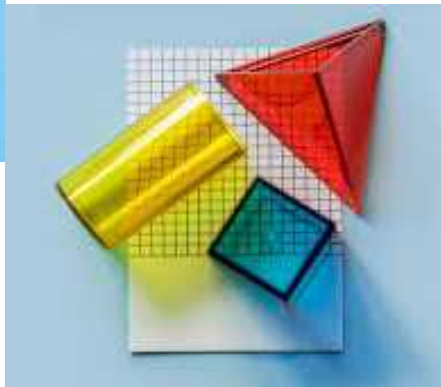




Project code:
2019-1-EL01-KA201-062914

Erasmus+ Call: 2019 - KA2 -



Erasmus+

This project is funded by the European Union.



3D printing technology aims students understanding maths and recycling procedure

*Curricula 2: Digital Sketching
"User Interface & Tools"*

Output 3 (O3) - 3D Printing and Maths

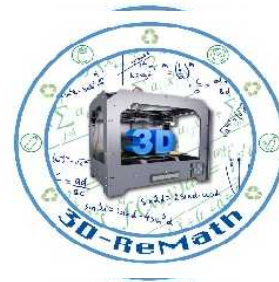
Overview (1/2)



We learn how to search for websites like Thingiverse to find 3D models.
We also learn how to download .zip files, extract them and preview the 3D models on SketchUp Web.

Overview (2/2)

- Set Up
- 3D Model Libraries
- Thingiverse



Set Up (1/2)



Before we begin it is good to have some tools and the same principles:

- Download a program to extract compressed files. For example 7-zip, which is free <https://www.7-zip.org/>
- Save all the extracted files on the same folder so it easier to find them in a later time

Set Up (2/2)



- All the files downloaded from the web are saved to Downloaded files by default
- It is good to create a folder with a name of your choice to extract all the files

3D Model Libraries (1/3)



- When it comes to 3D architecture and interior design, the thing that takes the most time is creating the models themselves
- In a lot of situations, they need to be done from scratch but not for everything
- An alternative solution is using the various free libraries of 3D models available online

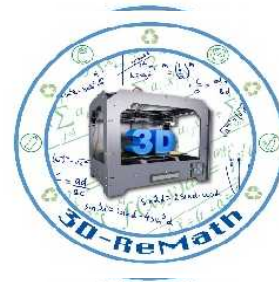
3D Model Libraries (2/3)



- These databases are usually well categorized, and almost anything can be found, models of boats, cars, trees to furniture, sinks, people, and more
- This can be an indispensable time-saver for designers trying to create an attractive and lively architectural design for investors and other parties of interest
- The 3D libraries have payed and free 3D models that can be download. The 3D models can be found in a variety of formats like 3ds, max, c4d, maya, blend, obj, fbx with low poly, animated, rigged, game, VR options and more

3D Model Libraries (3/3)

- Thingiverse
- GrabCAD
- Cults
- Autodesk Online Gallery
- Unity Asset Store
- Instructables
- Sketchfab
- Free3D
- Blendswap



Thingiverse (1/19)



For this lessons we're going to use Thingiverse.
<https://www.thingiverse.com>



Thingiverse (2/19)



- Thingiverse is a website dedicated to the sharing of user-created digital design files
- Provides open source hardware designs licensed under the GNU General Public License or Creative Commons licenses, users choose the type of user license they wish to attach to the designs they share
- Numerous technical projects use Thingiverse as a repository for shared innovation and dissemination of source materials to the public

Thingiverse (3/19)



- Thingiverse was started in November 2008 by Zach Smith as a companion site to MakerBot Industries, a DIY 3D printer kit making company
- Thingiverse received an Honorable Mention in the Digital Communities category of the 2010 ARS Electronica | Prix Ars Electronica international competition for cyber-arts
- There were 25,000 designs uploaded to Thingiverse as of November 2012 and more than 100,000 in June 2013. The 400,000th Thing was published on the 19 July 2014

Thingiverse (4/19)



YouTube. The Audiopedia. “What is THINGIVERSE? What does THINGIVERSE mean? THINGIVERSE meaning, definition & explanation”. 2017



Thingiverse (5/19)

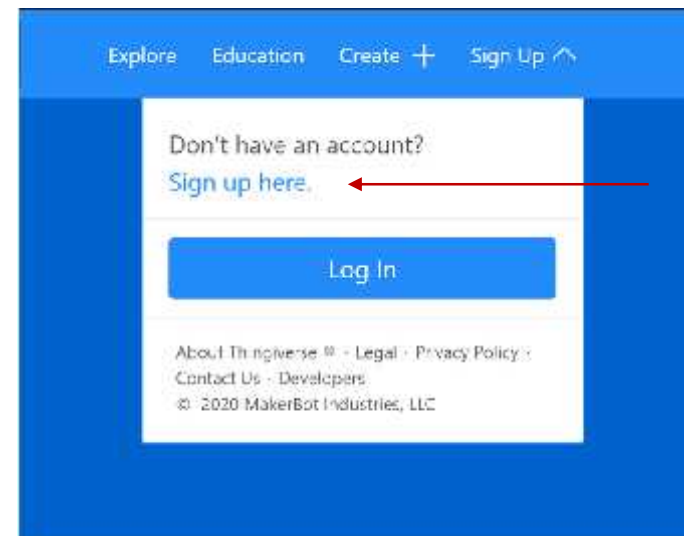


- If you want you can make an account by following the given instructions
- It is not mandatory but it gives you the ability to create your own collections with your favorite models, keep a record of the models you like or even upload your own creations

Thingiverse (6/19)



- Click “Sign Up” from the menu
- Then choose “Sing up here.”



Thingiverse (7/19)



Fill the information and click “CONTINUE”

Email Address

First Name

Last Name

Country

United States

Industry

Please choose

Subindustry

Please choose

Choose a Username

Password

Confirm Password

Birthday

mm/dd/yyyy

By clicking the Continue button below, you accept the MakerBot [Terms of Use and Privacy Policy](#)

CONTINUE

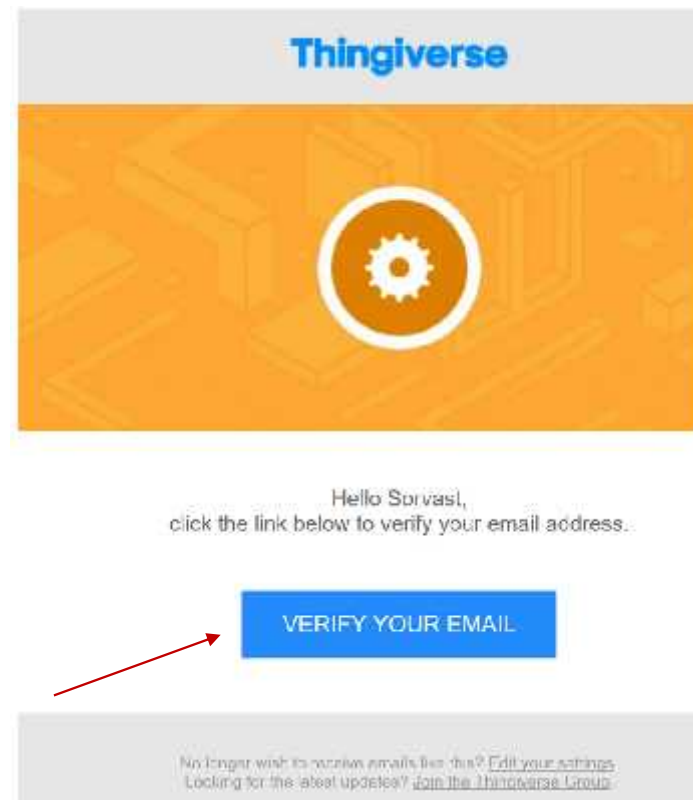
Already have an account? [Sign In](#)

Προστασία σας με reCAPTCHA

Thingiverse (8/19)



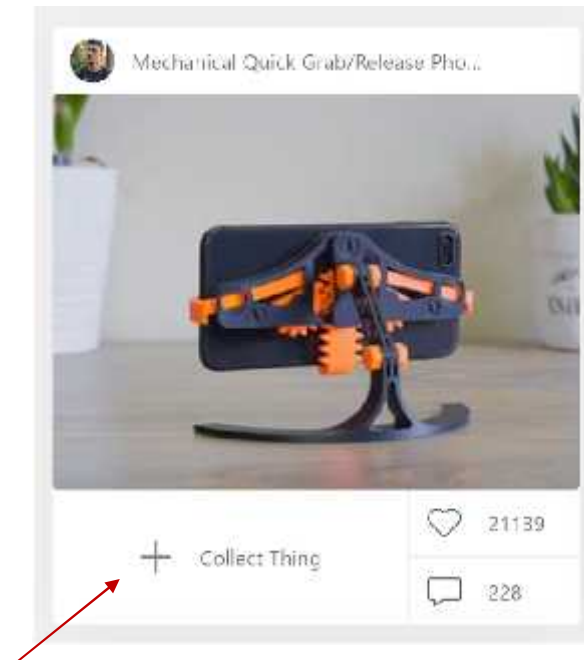
- A verification email will be sent to your email
- Click “VERIFY YOUR EMAIL”
- Then log in and you’re set



Thingiverse (9/19)



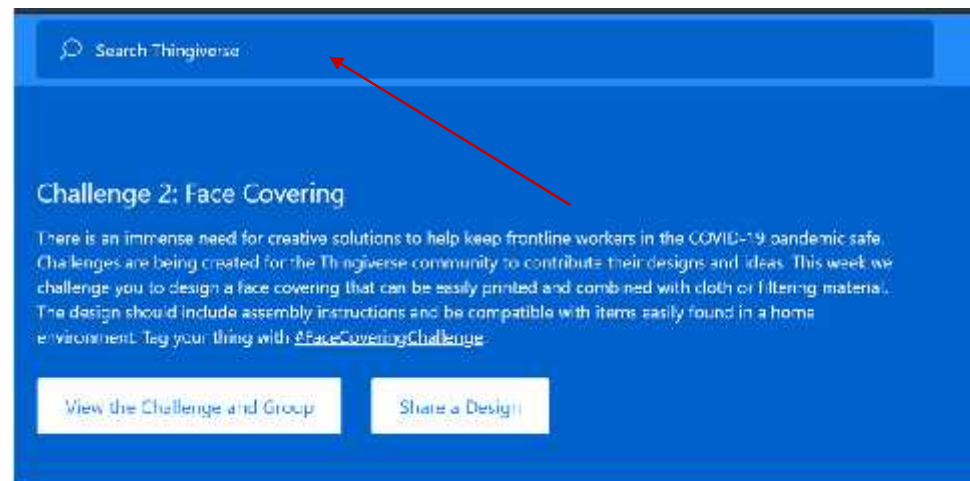
- You can add to your collections the objects you want by clicking “Collect Thing”
- You can like an object by clicking the heart symbol as seen on the image



Thingiverse (10/19)



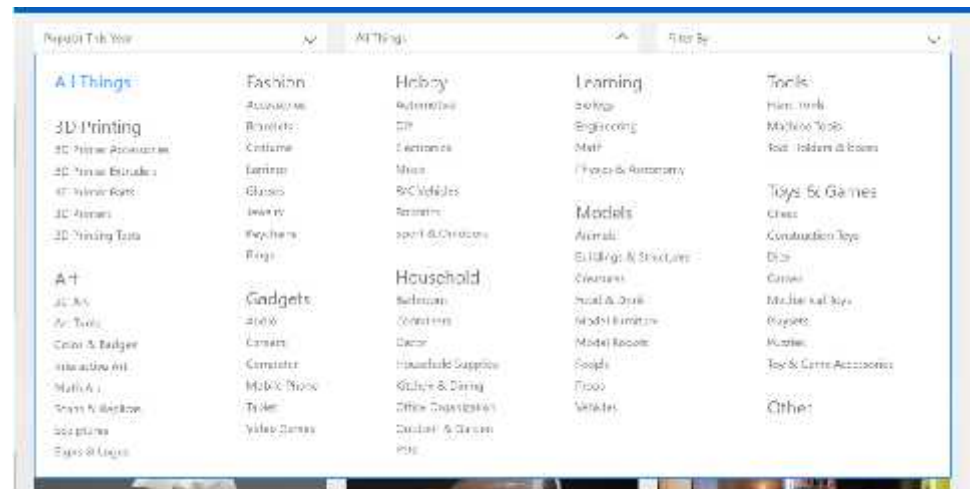
- You can search for whatever you want by writing on the search bar and press enter



Thingiverse (11/19)



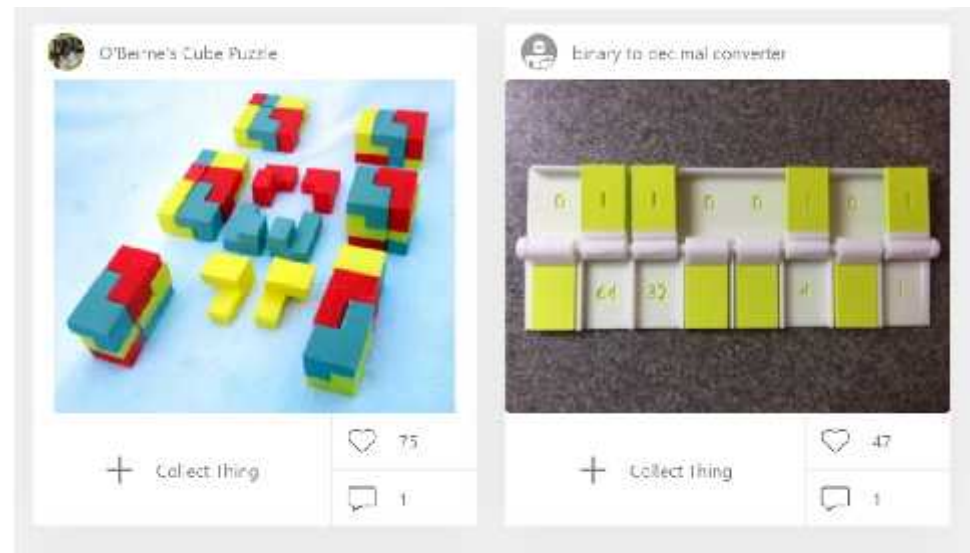
- If you want to find something more specific to your needs you can click “All Things” and choose from the available options



Thingiverse (12/19)



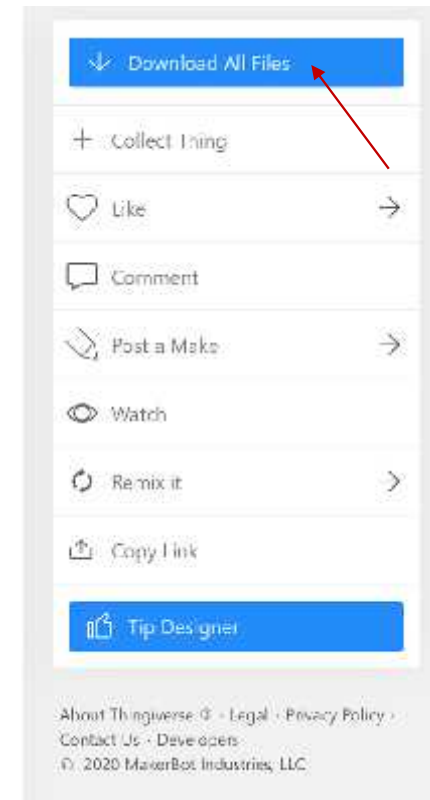
- If you want to find something you want to download just click on the box
- Let's choose for example the binary to decimal converter



Thingiverse (13/19)



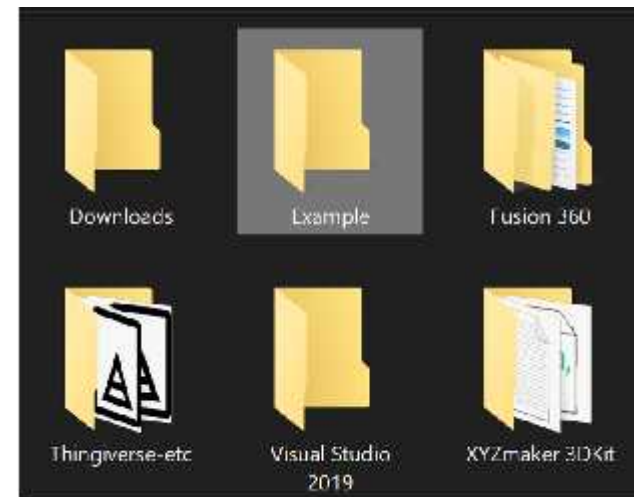
- Click “Download All Files” and wait for the downloading to complete



Thingiverse (14/19)



- Go to your Documents and create a folder with a name of your choice
- For the matter of this course, we name it Example but you can give it whatever name you want



Thingiverse (15/19)



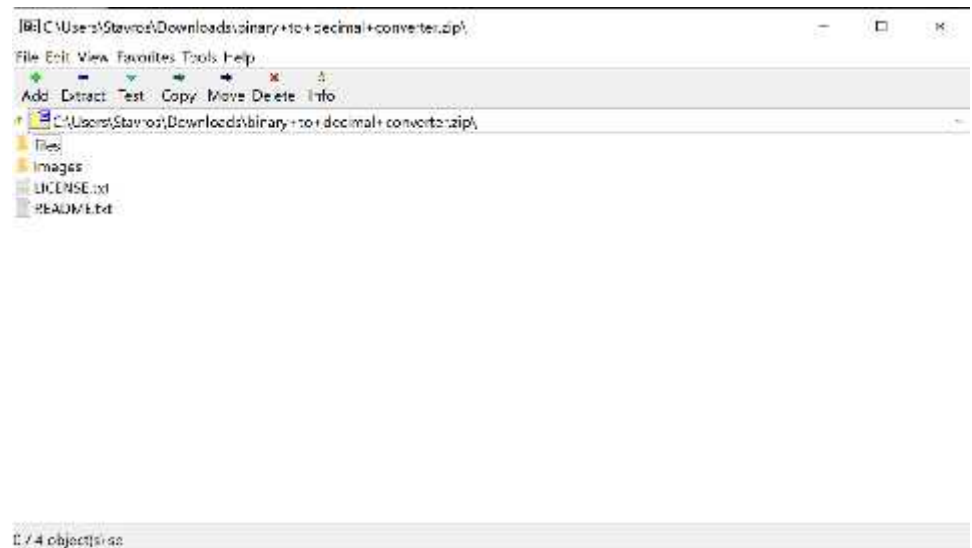
- Go to Downloads and find the file you just downloaded
- Double click the file
- You'll see something like this
- Click extract and choose as save location the file we created at Documents



Thingiverse (16/19)



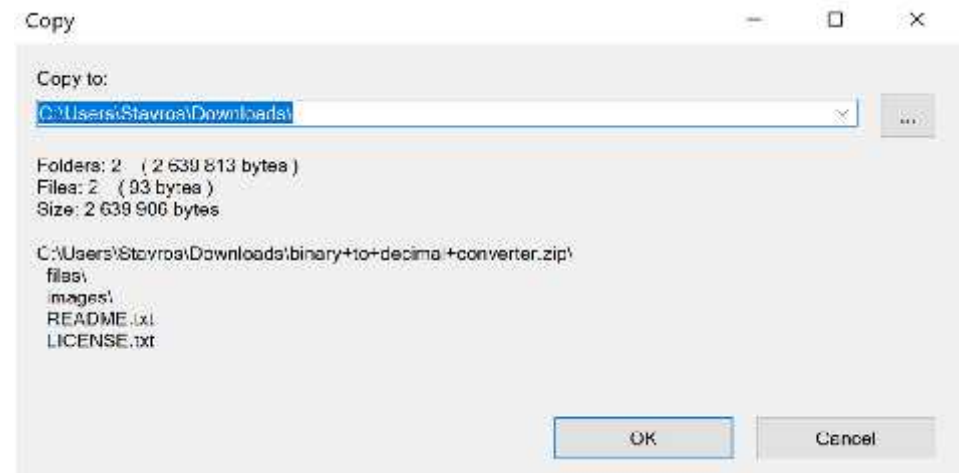
- Go to Downloads and find the file you just downloaded
- Double click the file
- You'll see something like this
- Click extract



Thingiverse (17/19)



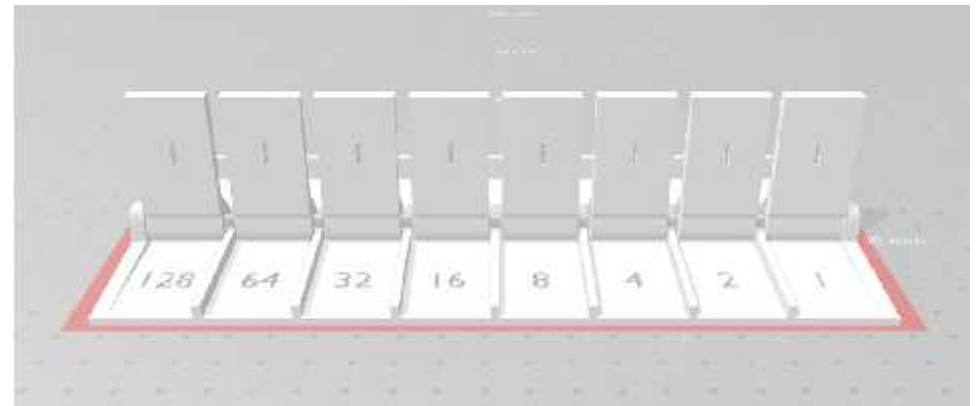
- A prompt windows will appear
- Change as the save destination folder the folder we created on Documents



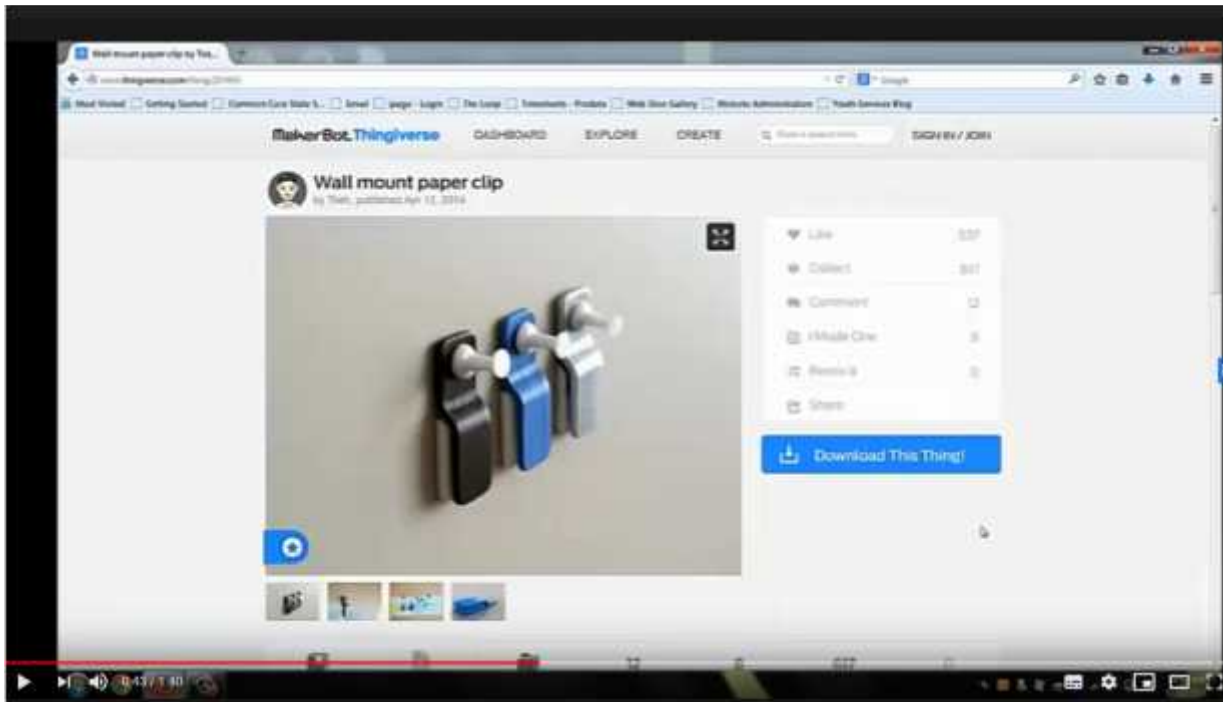
Thingiverse (18/19)



- Now you can preview the 3D object you just download



Thingiverse (19/19)



YouTube. Barringtonlibrary. "Download a 3D File from Thingiverse". 2014



Thank you!!

privasi.aegean.gr

