CAD Assignment
(Technical Communication, GEIAK100-B2a)

Create a functional and well-designed CAD model based on the object of your choice. This assignment aims to showcase your proficiency in using OnShape, including part modeling, design tools, and assembly constraints, while following best practices for creating 3D models.

Requirements:

General:

☐ Use OnShape for modelling.

☐ The model should represent an object of your choice (it must be accepted first by the instructor).

Parts:

☐ The model must consist of 3 or more parts, that can be assembled.

☐ Use 2 or more part design tools (e.g., extrude, revolve, sweep, loft) during the modelling process.

☐ Apply edge smoothing (e.g. fillets or chamfers) in your model.

Assembly:

☐ Apply at least 2 different types of mates (e.g., fastened mate, revolute mate, slider mate, planar mate, cylindrical mate, pin slot mate) during the assembly process.

☐ Ensure that the assembly is functional: the model must be movable as intended, and parts should not enter illegal positions during movement.

Task selection: You must submit the chosen object for approval via email to the instructor (aron.kiss@uni-miskolc.hu), before starting modelling. Please include a brief description of the object you plan to model. On page 2, you can see some suitable examples, but *you may also choose a different everyday object*.
Task selection deadline: 2024. 11. 27. 12:00

Submission: The link to the completed OnShape model must be sent to the instructor via email (aron.kiss@uni-miskolc.hu). Instructions for sharing the document can be found on page 3.
Submission deadline: 2024. 12. 11. 12:00

The submitted solutions will then be evaluated, and feedback will be provided via email. Solutions that do not meet the required standards can be revised until 2024. 12. 15.
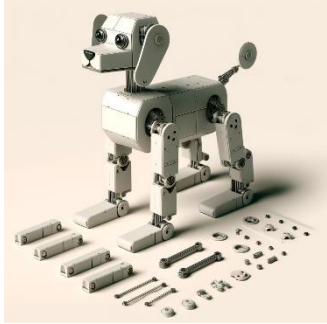
Useful resources for the assignment:

https://edu.iit.uni-miskolc.hu/tanszek:oktatas:techcomm
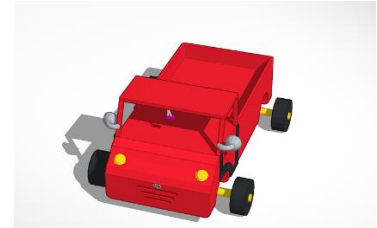
Miskolc, 2024. 11. 20.

Kiss Áron

Project ideas

robot dog

bicycle

toy car

coffee grinder

bottle capper

rotary telephone
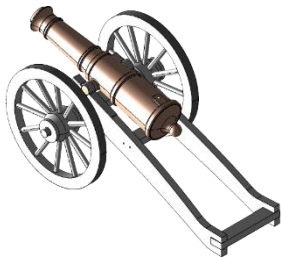
cannon
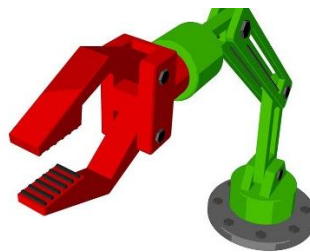
robotic arm

bench vice
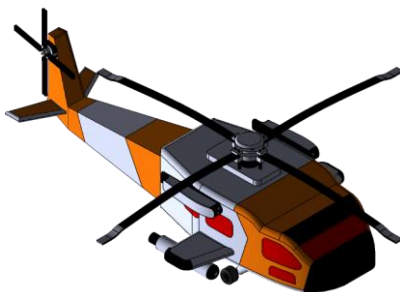
helicopter

meat grinder
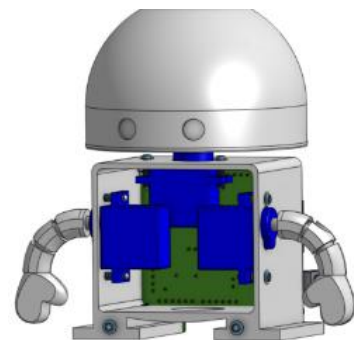
humanoid robot

Further inspiration:
https://cad.onshape.com/documents?nodeId=3&resourceType=filter
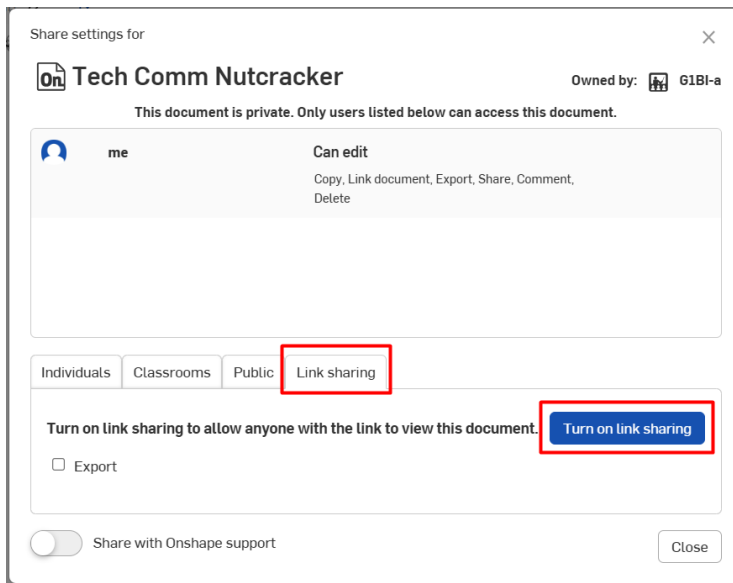
Sharing your document

Step 1: Push "Share" button.
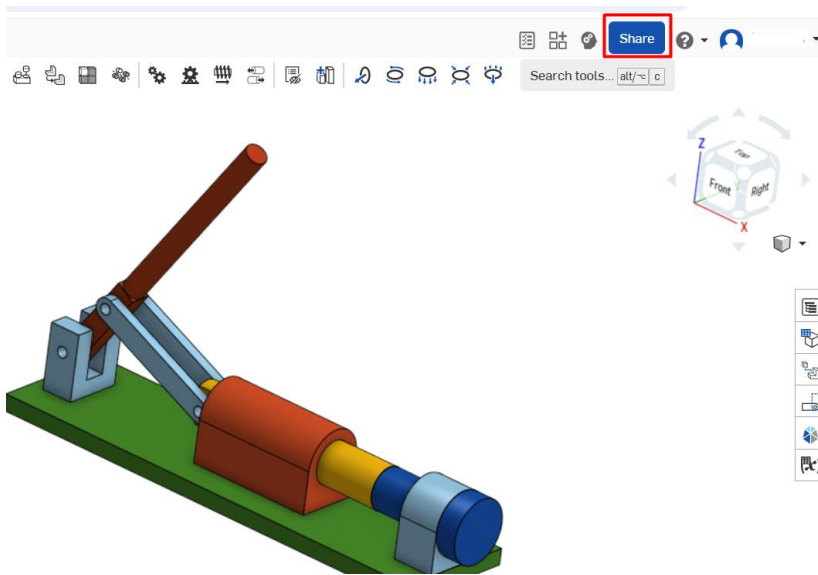
Step 2: Push "Link sharing", then "Turn on link sharing".

Step 3: Copy the generated link that should be submitted.