

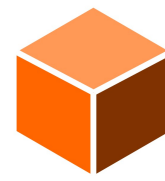
3D

3D PRINT REPORT

SCHOOL	COUNTRY
Šolski center Velenje, Elektro in računalniška šola (School of Electrical and Computer Engineering)	Slovenia
PROJECT NAME	Mentor
Rattle	Viljem Osojnik
STUDENT NAMES	DATE
Rene Pačnik, Aljaž Ferme, Val Juteršek	May 2024

A type of 3D printer	Anycubic Mega X
Used material	PLA
Filament diameter	1,75 mm
3D CAD program	SolidWorks
SLICER programs for 3D	Ultimaker Cura





SUBJECT OF MODELING ON THE TOPIC OF TRADITIONAL CRAFT AND CULTURAL HERITAGE

The rattle is a traditional device originating from Slovenia, Austria and Croatia. Its history goes back centuries and is closely linked to viticulture and customs in these regions. The original purpose of the rattle was to prevent birds, especially crows and other birds, from feeding on the sweet and juicy clusters in the vineyards. It also served as a symbol to announce the start of the harvest. The knocker consists of a wooden frame to which wooden leaves or wings are attached. These wings turn in the wind and produce a characteristic rattle that scares away birds. In the centre of the rattle is a pole which also rotates. The rattle can reach an impressive size and be placed on a pillar or on a high pole in the vineyard.

DESCRIBE THE WORK PROCESS

- Formation of working group, division of roles and tasks of group members.
- Selection of a suitable natural and cultural heritage object
- Study of production process of the rattle by watching video
- Creating sketches of basic elements and rotating parts on paper
- 3D modelling of the rattle
- Preparing of 3D models for 3D printing
- 3D printing of components
- Assembling the components by hand
- Gluing, painting and additional assembling of 3d printed components and parts of the rattle

DESCRIBE ANY DELAYS AND/OR INCIDENTS

The rattle is made of many different components, so precision in 3D printing and assembly was required.

