

3D Viewer v2.0

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1 3D Viewer

- The program was developed in C++ language of **C++17** standard using `g++` (GNU C++) compiler.
- GUI implementation, based on the **QT** library with API for **C++17**.
- The program provides the ability visualise the 3D wireframe models and perform actions on it.
- Program interface allows:
 - Translate the model by a given distance in relation to the **X, Y, Z** axes.
 - Rotate the model by a given angle in relation to its **X, Y, Z** axes.
 - Scale the model by a given value.
 - Customizing the type of projection (parallel and central).
 - Setting up the type (solid, dashed), color and thickness of the edges, display method (none, circle, square), color and size of the vertices.
 - Choosing the background color.
 - Settings must be saved between program restarts.
 - Saving the captured (rendered) images as **BMP** and **JPEG** files.
 - Recording small screencasts - the current custom affine transformation of the loaded object into gif-animation by a button "GIF".