## ABSTRACT

Bachelor thesis 96 pp., 8 table, 18 fig., 2 appendixes, 24 sources.

Topic: "Module of physical processes for the gaming world"

The aim of this work is to develop physical module, through which the gameplay is realistic. The modeling of physical processes dynamics and collision objects of the external forces on the object and description of the principles of physical modules.

The results of the:

- Were analyzed modeling physical bodies and processes.
- A review of the best existing physical modules.
- The algorithm of the physical module and selected appropriate physical laws.
- Implemented the necessary modeling of physical processes.

Practical novelty:

- Own physical module.
- Created a game based on physical module.

The results of this work recommended in cases that require elaborate game using physical processes for realistic gameplay. With further research in this area, it is advisable to alter the processing of natural processes and extend the set of characteristics.

PHYSICAL LAWS, MODELING OF PHYSICAL BODIES AND PROCESSES, RENDER, COLLISION, TRANSFORMATION, JAVASCRIPT, HTML,CSS, CANVAS, HAVOK, PHYSX, BOX2D.