

This thesis focuses on the description of a tool designed for simulating fire spread across landscapes, which is developed within the cross-platform Unity game engine. This tool stands out due to its visually appealing interface and exceptional user-friendliness, offering diverse applications. The fire spread is modeled using simple, non-deterministic but realistic rules. The simulation is conducted on a simplified, procedurally generated world model. The application's versatility allows it to be used in diverse contexts. For instance, it can serve as a support tool in teaching about factors affecting the dynamics of fire spread. Additionally, it could be useful for beginner programmers by providing them the opportunity to visualize their landscapes, generate data for predicting fire spread chances, along with the options to visualize their own predictions.