Posudek diplomové práce

Matematicko-fyzikální fakulta Univerzity Karlovy

Autor práce	Erdi İzgi		
Název práce	Framework for Roguelike Video Games Development		
Rok odevzdání	2018		
Studijní program	Informatika	**Studijní obor**	Počítačová grafika a vývoj počítačových her

Autor posudku	Martin Modrák	**Role**	Oponent
Pracoviště	Mikrobiologický ústav Akademie Věd ČR		

Text posudku:

The submitted work is definitively a result of a substantial effort by the student and demonstrates good programming skills of its author. However, most of this effort was obviously consumed by development of a graphical editor for trees compatible with the Unity game engine, leaving other aspects of the assignment unfulfilled.

The aforementioned tree editor is the strongest part of the work. It is aesthetically pleasing, works well, its code is well structured and documented. The discussion of the editor is also one of the better parts of the thesis text and I value the description of how to extend various parts of the editor.

The biggest shortcoming of the thesis is that the software does not let the user do much meaningful work. The framework itself only covers player movement and simple map generation, but does not include combat, item interactions and inventory which are (according to the thesis itself) important features common to roguelike games. Adding those features to a game built with the framework would also entail non-trivial amount of programming. Modifying the existing aspects of the framework (e.g. changing the way the minimap works) is also non-trivial and may require modification of some of the core visitor scripts.

In general, the framework does not let the user to create complete games, neither is it useful for prototyping game mechanics (e.g. the way puzzlescript helps prototyping puzzles).

The tree editor also seems a bad fit for the task at hand as almost all the available customizations are just choices between one or more options, only represented in the form of a tree. In fact, for most nodes there is only a single way to choose its children and only a single node that may be its parent. A well-organized set of drop-down menus and checkboxes would likely let the user achieve the same tasks with much less effort required from the framework developer.

The actual text of the thesis is comprehensible but contains a large number of grammatical and stylistic errors. The code outside the tree editor is not documented much. There also is no user-manual, only a short instructional video, which covers some, but definitively not all aspects of using the framework. The submitted version of the software also has some bugs, most notably the "Load" feature of the tree editor is broken.

Despite those problems, I recommend the thesis for defense.

Práci doporučuji k obhajobě.

Práci nenavrhuji na zvláštní ocenění.

Pokud práci navrhujete na zvláštní ocenění (cena děkana apod.), prosím uveďte zde stručné zdůvodnění (vzniklé publikace, významnost tématu, inovativnost práce apod.).

Datum 22. ledna 2018 **Podpis**