Supervisor's statement of a final thesis

Supervisor:	doc. Ing. Mgr. Petr Klán, CSc.
Student:	Karen Akopian
Thesis title:	Implementation of AI Turn-Based Strategy Game in Virtual Reality
Branch / specialization:	Web and Software Engineering
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Evaluation criteria

1. Fulfillment of the assignment

▸ [1] **assignment fulfilled**
  [2] assignment fulfilled with minor objections
  [3] assignment fulfilled with major objections
  [4] assignment not fulfilled

The assignment consisted of nine points. All points are met in some way, although some in the minimal form. It is possible to say that the thesis is built in a very nice way. On the other hand, insufficient analysis, design and testing of the proposed game do not allow its excellent evaluation. Unfortunately, there was no enough time for the deepening.

2. Main written part $\qquad$ 80/100 (B)

The thesis has a very good structure. However, it lacks a deeper insight into the background (analysis and design) of the proposed game, the Unity background and the deeper background of the turn-based strategies. The author is very capable, but in the end he lacked time for sufficient testing of the game and its comparison with known turn-based strategies. It is also not clear from the text exactly how the MiniMax algorithm is used in the virtual strategy or whether it serves as a guide for the players only.

3. Non-written part, attachments $\qquad$ 100/100 (A)

The virtual scenes created in Unity fulfill their basic purpose and look successful.

4. Evaluation of results, publication outputs and awards $\qquad$ 80/100 (B)

Thesis results can be used in the game environment after a small refinement. Above all, it is needed to elaborate on the possible strategies of the game and their evaluation.

5. Activity of the student

    [1] excellent activity
▸ **[2] very good activity**
    [3] average activity
    [4] weaker, but still sufficient activity
    [5] insufficient activity

The student consulted periodically at longer intervals, fulfilled the supervisor's suggestions and was well prepared.

6. Self-reliance of the student

    [1] excellent self-reliance
▸ **[2] very good self-reliance**
    [3] average self-reliance
    [4] weaker, but still sufficient self-reliance
    [5] insufficient self-reliance

The student demonstrated very good abilities for independent creative work. However, he partially lacks a deeper connection between individual topics and greater thematic depth. In addition, Internet resources should not be the only way to draw on knowledge.

The overall evaluation   80 /100 (B)

Karen did a lot of new work and had to acquire a lot of new skills. As stated above, the work for excellent evaluation lacks a deeper concept and connection of individual parts, a deeper description of the motivation, design, programming and testing of the new game and a comparison of the new game with already known turn-based strategies.

Instructions

Fulfillment of the assignment

Assess whether the submitted FT defines the objectives sufficiently and in line with the assignment; whether the objectives are formulated correctly and fulfilled sufficiently. In the comment, specify the points of the assignment that have not been met, assess the severity, impact, and, if appropriate, also the cause of the deficiencies. If the assignment differs substantially from the standards for the FT or if the student has developed the FT beyond the assignment, describe the way it got reflected on the quality of the assignment's fulfilment and the way it affected your final evaluation.

Main written part

Evaluate whether the extent of the FT is adequate to its content and scope: are all the parts of the FT contentful and necessary? Next, consider whether the submitted FT is actually correct – are there factual errors or inaccuracies?

Evaluate the logical structure of the FT, the thematic flow between chapters and whether the text is comprehensible to the reader. Assess whether the formal notations in the FT are used correctly. Assess the typographic and language aspects of the FT, follow the Dean's Directive No. 26/2017, Art. 3.

Evaluate whether the relevant sources are properly used, quoted and cited. Verify that all quotes are properly distinguished from the results achieved in the FT, thus, that the citation ethics has not been violated and that the citations are complete and in accordance with citation practices and standards. Finally, evaluate whether the software and other copyrighted works have been used in accordance with their license terms.

Non-written part, attachments

Depending on the nature of the FT, comment on the non-written part of the thesis. For example: SW work – the overall quality of the program. Is the technology used (from the development to deployment) suitable and adequate? HW – functional sample. Evaluate the technology and tools used. Research and experimental work – repeatability of the experiment.

Evaluation of results, publication outputs and awards

Depending on the nature of the thesis, estimate whether the thesis results could be deployed in practice; alternatively, evaluate whether the results of the FT extend the already published/known results or whether they bring in completely new findings.

Activity of the student

From your experience with the course of the work on the thesis and its outcome, review the student's activity while working on the thesis, his/her punctuality when meeting the deadlines and whether he/she consulted you as he/she went along and also, whether he/she was well prepared for these consultations.

Self-reliance of the student

From your experience with the course of the work on the thesis and its outcome, assess the student's ability to develop independent creative work.

The overall evaluation

Summarize which of the aspects of the FT affected your grading process the most. The overall grade does not need to be an arithmetic mean (or other value) calculated from the evaluation in the previous criteria. Generally, a well-fulfilled assignment is assessed by grade A.