CTU CZECH TECHNICAL UNIVERSITY IN PRAGUE

THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title: A Platform for Virtual Reality Applications

Author's name: Hlusička Jakub
Type of thesis: bachelor

Faculty/Institute: Faculty of Electrical Engineering (FEE)

Department: Department of Cybernetics **Thesis reviewer:** Ing. David Sedláček, Ph.D.

Reviewer's department: Department of Computer Graphics and Interaction, FEE, CTU

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment extraordinarily challenging

How demanding was the assigned project?

The assignment and the expected scope of work is broad, mainly due to the need to create a universally functioning platform.

Fulfilment of assignment

fulfilled

How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.

The assignment is fulfilled in its entirety.

Activity and independence when creating final thesis

A - excellent.

Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.

The student worked systematically and independently. He conscientiously adhered to agreed milestones and proactively solve problems.

Technical level B - very good.

Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?

The text of the bachelor thesis is at a good level. Describes the issue, does not deviate from the topic.

I miss the comments at source code, and I also miss programming documentation - this is from my point of view crucial for future work extensions.

Formal level and language level, scope of thesis

A - excellent.

Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?

The work is written in English at a perfect level. The text is easy to read and structured. Formally, the work corresponds to the FEL standards.

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Selection of sources, citation correctness

A - excellent.

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

Resources are well selected and combine peer-reviewed publications, books, and online resources, reflecting the current state of development. All are referenced to a sufficient extent, according to custom. Online resources are mainly referenced from the text in the form of footnotes.

Additional commentary and evaluation (optional)

Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.

The work as a whole is very interesting and offers wide opportunities for further expansion and research in the use and sharing of virtual reality applications.

Questions:

- Do you thing that commands from section 2.5.2 are enough? Do you already have ideas for new ones?
- Page 13 function update. In common game engines, an update is called with delta-time measured from the previous frame update. Do you have some reason for another time reference?

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

The work as a whole is at a perfect level. The student had to implement a lot of functionality to make it functional. He overcomes many problems caused by the novelty of the technology (mainly OpenXR, and virtualization).

The grade that I award for the thesis is A - excellent.

Date: **8.6.2020** Signature: