

THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title: System for Evaluation of Model-Based User Interface Testing Techniques

Effectiveness

Author's name: David Zdenek

Type of thesis: master

Faculty/Institute: Faculty of Electrical Engineering (FEE) **Department:** Computer Graphics and Interaction

Thesis reviewer: Feras Daoud **Reviewer's department:** Computer Science

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment challenging

How demanding was the assigned project?

Requires understanding Model-Base Testing (MBT), Combinatorial Interaction Testing (CIT), UI testing, automation testing, designing metrics to evaluate effectiveness of MBT and CIT techniques, and potentially building and testing a prototype system.

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 thesis directly tackles the assigned task of evaluating MBT and CIT techniques for UI testing. A well-designed evaluation system with appropriate metrics can achieve this goal. However, a complete evaluation hinges on the implementation and testing of some open-source systems. Reviewing these sections/ results and discussing the intended scope with David helped determine how effectively he fulfilled the assignment.

Activity and independence when creating final thesis

B - very good.

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 activity and independence in thesis creation can be assessed by evaluating his enthusiasm, time management, engagement with his supervisor, and ability to work on research and analysis tasks without constant guidance. This includes punctuality, initiative in consultations, and demonstrating a thoughtful approach to the project, ultimately showing how effectively he managed his workload and research process on time.

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?

A strong indicator of a technically sound thesis from a very good student is whether his chosen methods directly answer the research question, and if he explains those methods in a way that's clear and easy to follow, even for someone outside their field. This clarity ensures the research is well-founded, the student demonstrates expertise, and the reader can grasp the technical aspects of the project.

Formal level and language level, scope of thesis

B - very good.

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 thesis is well-formatted, organized logically, and use proper academic language. Even with a focused topic, the research should be deep enough and well-explained for readers to understand the analysis.

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Selection of sources, citation correctness

B - very good.

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?

A strong thesis should show the student's awareness of prior research through proper citations. David could choose relevant, reliable sources to back up his claims, and clearly distinguish his own ideas from established knowledge. Finally, all citations are formatted correctly according to the chosen style guide. This ensures the work is well-supported, original, and adheres to proper academic referencing practices.

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 thesis provided valuable insights related to the effectiveness of CIT and its impact on design a test strategy.

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

The thesis shows strong research abilities and originality, is well-structured, but would improve with more in-depth analysis and better incorporation of literature, deserving a "very good" grade.

It likely demonstrates technical soundness, clear presentation, and good referencing practices.. Overall, the thesis suggests a strong foundation for a successful defense. Here are some questions to explore during the presentation:

1) Can you elaborate on the novelty of your findings? 2) How does your work address existing research gaps? 3)

What are the potential applications of your solution (if applicable)?

The grade that I award for the thesis is **B** - very good.

Date: **3.6.2024** Signature: