VILNIUS UNIVERSITY
ŠIAULIAI ACADEMY
INSTITUTE OF REGIONAL DEVELOPMENT
STUDY PROGRAMME COMMITTEE IN THE FIELD OF COMPUTER SCIENCE

General Requirements
for the Research Papers of the Students of Software Engineering

1. *General provisions*

1.1.   This procedure sets the minimum requirements for the students' research papers. Students' research papers include the Internship Reports, Course Papers, Bachelor's and Master's Final Theses, various forms of presentations, educational tasks assigned by Computer Science lecturers, etc.

2. *Requirements for the research papers*

2.1.   Mandatory parts of the research paper are the following: title page, warranty page, contents, summaries in Lithuanian and English, introduction, body text, conclusions, references, appendices.

2.2.   *The title page* indicates the university, the name of the institute, the name of the study program, the type and title of the research paper, the student's name and surname, and the place and year of writing the research paper.

2.3.   *The warranty page* is intended to control the independence of the research paper and its submission. When submitting work, it must contain the signatures of the student and research supervisor.

2.4.   *Contents.* This is a list of the headings for the parts of the work with references to their pages. When the main parts of the written work are subdivided and named, it is necessary to indicate them in the contents.

2.5.   *Summaries.* Summaries of the work briefly describe the research problem and the most important results in Lithuanian and in English. The title of the paper is always written at the top of the summaries.

2.6. *Introduction.* The motivation for choosing the topic of the paper are presented in this part, the general context of the work and its relevance are indicated. The main literature used is discussed. The introduction can also name the research methodology and present the theses to be defended in the paper.

2.7. *The body text.* The research problem is raised, goals and hypotheses are presented (theses and arguments are presented). The problem must be raised by analysing the research of other authors in the field, defining the main concepts, revealing the goals of the research in an argumentative way. This is a purposeful analysis of literary sources on a certain topic, which helps the student to formulate work goals and hypotheses (lay out theses and arguments).

2.7.1. The typical structure of the body text is recommended as follows:

I. ***Analytical part.***

1) Topic analysis.

2) The analysis of research scope.

3) Work area model.

4) Analysis of the choice of tools and measures.

II. Project part.

1) Project (work) execution plan.

2) Initial description of the project.

3) Justification of the choice of tools and measures.

III. Description of research paper procedure.

1) Description and justification of problems and their solutions.

2) Description of the final state of the project.

3) Analysis of research results.

4) Remarks and recommendations.

2.7.2. The citations must be clearly marked and their total volume must not exceed 10% of the scope of the work description.

2.8. *Conclusions*. These are short and summarized answers to the most important questions raised in the introduction and a concise assessment of whether the goals of the research formulated in it have been achieved.

2.9. *References*. Only the works of those authors, that have been mentioned in the text are included in the list of references. Scientific literature and sources used in a research paper are indicated by in-text references to the list of references. The list of references is compiled according to the authors' first letter of surnames in alphabetical order, and when several works by the same author are included, according to chronology. Non-author publications (e.g., dictionaries, handbooks, etc.) included in the list of references are placed in the same list of references according to the first letter of the title.

For example:

1. Nietzsche, Friedrich, Linksmasis mokslas. Vilnius, 1995

2. Nietzsche, Friedrich, Will to Power: (Nov. 1887-March 1888), Creative Commons license. [accessed 2023 06 07] Available online: http://www.archive.org/details/TheWillToPower-Nietzsche

3. *Requirements for the presentation of the research paper*

3.1. Mandatory parts of the presentation are as follows: title, introduction, body, conclusions and the list of references.

3.2. *In the title part*, the university, institute, name of the study program, type and title of the presentation, the student's name and surname, and the place and year of writing the paper are indicated.

3.3. *Introduction*. In this part, the topic of the presentation is defined and the reasons for the motivation of the research, the general context of the topic and its relevance are indicated. Formulations of presented theses can also be provided.

3.4. *The body*. The research problem is raised, goals and hypotheses are presented (theses and arguments are presented). The problem must be raised by analysing the research of other authors in the field, defining the main concepts, revealing the goals of the research in an argumentative way. It is recommended to follow the structure indicated for the research paper.

3.5. The citations must be clearly marked and in-text references to sources or references must be provided.

3.6. *Conclusions*. These are the most important short and summarized answers to the questions raised in the introduction and a concise assessment of whether the goals of the research formulated in it have been achieved.

3.7. *References*. The list of references is compiled in the same way as in research papers (see above).

4. Requirements for other types of research works

When conducting other types of works, you have to keep with the restrictions and requirements provided in the approved regulations of the study subject and follow the lecturer's instructions and recommendations.

5. General requirements for text writing

5.1. The research work has to be written in the correct Lithuanian language. Terms, surnames and titles of foreign authors are written according to the valid resolutions of the State Commission of the Lithuanian Language. If necessary, foreign language equivalents are indicated next to Lithuanian terms in parenthesis.

5.2. The text is written on A4 format sheets in Times New Roman 12 pt font and 1.5 line spacing. On the title page, the student's name and the title of the work are written in Times New Roman 14 pt font, the title is written in bold font.

5.3. Empty margins are left on the text page: left side – 30 mm, right – 10 mm, top – 20 mm, bottom – 20 mm. Lithuanian quotation marks („ … ") are used. Individual words can be written in bold font in the text.

5.4. The page numbering is consecutive, starting with the title (the number of the title page is not written) and ending with the appendices. The page number is written at the bottom of the page on the right side of the blank margin in Arabic numerals, without a period or other punctuation marks.

5.5. The text of the body of the research paper is divided into chapters and sub-chapters. These parts of the text are numbered with Arabic numerals (new numbers are added to the smaller ones from the right), for example, 1.1., 1.2., 1.2.1., 1.2.2.

5.6. Each chapter (part of the paper) begins on a new sheet. Titles of chapters (parts of the paper) are numbered, aligned in the centre of the page. There is no period after them. The titles of sub-chapters are written in lowercase letters, except for the first one, aligned in the centre of the page.

5.7. Appendices have to have titles and be printed on separate sheets.

5.8.   The research papers have to be formatted in high quality, printed (and bound) or submitted in electronic form (pdf format) to the Administrator of the Institute of Regional Development.

5.9.   In the research paper, it is necessary to indicate which ideas are mentioned, analysed or presented verbatim by other authors. Verbatim presentation (quoted) of another author's idea is indicated in the text with quotation marks. When the author is mentioned or quoted in the text, the number of the publication in the bibliography is indicated in square brackets.