

The diploma project includes a graphic part and an explanatory note.

1.1 Explanatory note must be a hard bound. The volume of the explanatory note is approximately 40-50 pages.

1.2 The explanatory note contains the following parts (the sequence is preserved):

- title page (1 page);
- thesis project task (2 pages);
- contents (1-2 pages);
- introduction (1 page);
- main text (the sections are defined by the task blank; the volume is determined by a student but not fewer than 30 pages);
- conclusion (1 page);
- references (2-4 pages);
- appendix (if necessary).

1.3 The text of the explanatory note is divided into logically related parts – sections, subsections and paragraphs.

1.4 Sections have serial numbers indicated by Arabic numerals without a period in the end; the serial numbers are typed with a paragraph indent. Subsections are numbered within the sections they are related to. It is recommended to start each section of the explanatory note with a new page.

1.5 The text is presented in compliance with the rules of spelling and punctuation. Special attention is to be paid to paragraphs, enumerations and use of numbers, symbols and dimensions.

1.6 The explanatory note is completed using any word processor (Microsoft Word, LibreOffice Writer, Google Doc, etc.) on A4 size paper, Times New Roman Regular of font size 14 with a line spacing of 1.15.

Italic and bold font is allowed to focus on certain elements.

The numbers of sections, subsections, paragraphs and subparagraphs are highlighted in bold. Section headings are bolded in size 16, and subsections – in bold 14.

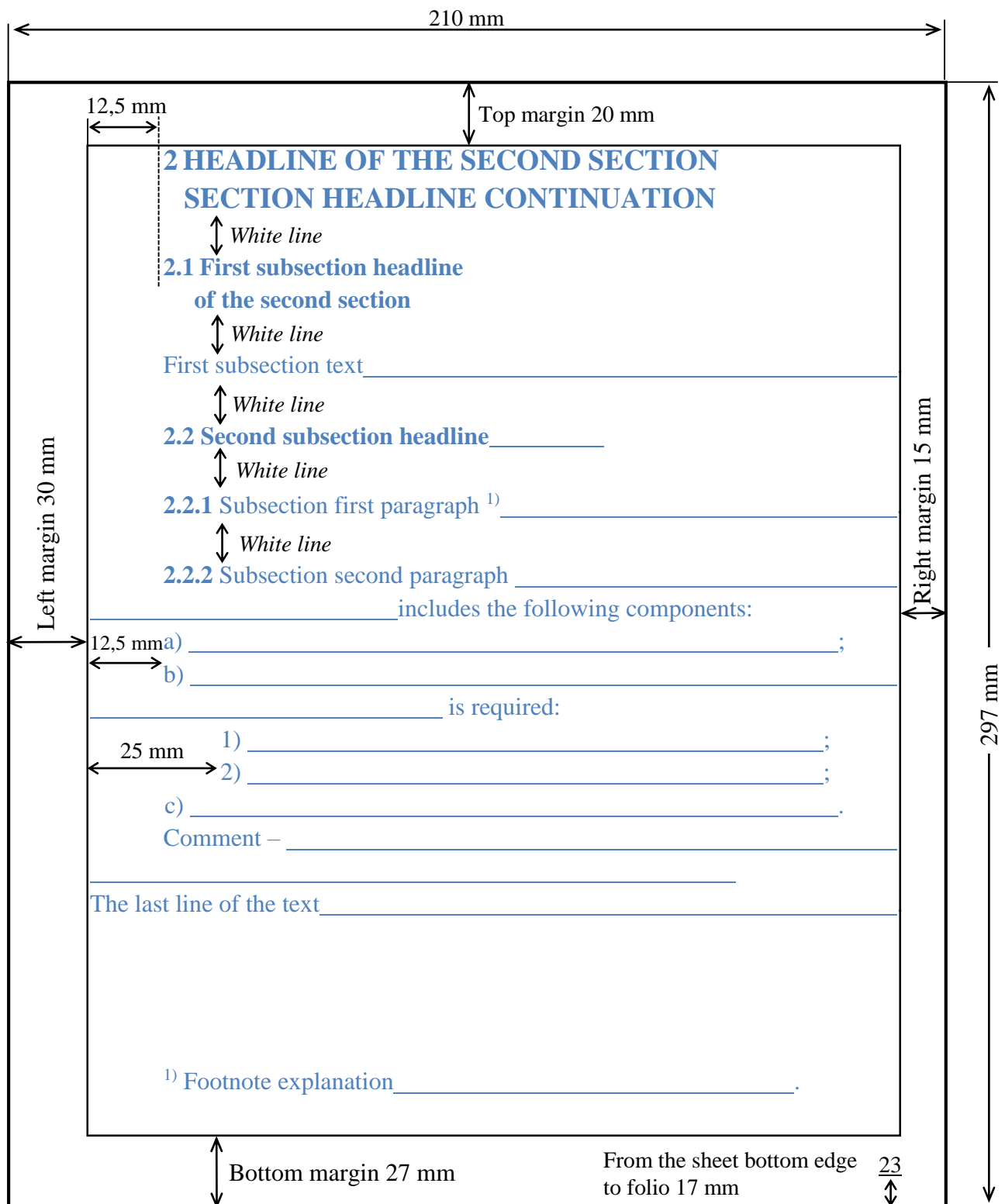
Paragraphs in the text begin with 1,25 cm indent.

1.7 The list of all sections and subsections including serial numbers and headings is made out into contents. Contents example:

## CONTENTS

Introduction .....	5
1 Mobile application development .....	9
1.1 Graphical interface development .....	9
1.2 Database development .....	12
1.3 Business logic of the application development .....	20
1.4 Conclusion .....	24
2 Mobile application testing .....	25
Appendix A The GUI forming code .....	45

1.8 The pages of the explanatory note are numbered with Arabic numerals in the lower right corner. The title page and the task sheets are included in the general numbering but the page number is not put on them.



1.9 The explanatory note often uses enumeration. Each enumeration element is typed with a lowercase letter and starts a new line; the line should start with a paragraph indent and a “dash” sign; the end of the line is marked with a semicolon.

1.10 With a complex enumeration (consisting of several sentences), each enumeration element is numbered and typed with a capital letter; the line should start with a paragraph indentation; the end of the line is marked with a period.

1.11 Mathematical formulas are given clearly with the accurate signs, numbers and letters placement. Letters of the Latin alphabet are typed in italics; numbers and letters of the Greek alphabet are typed in Roman type.

Formulas occupy separate lines in the center and are separated from the text by blank lines.

It is allowed to transfer part of the mathematical formula to the next line. In this case, the mathematical sign at the boundary is typed two times - at the end of the first and at the beginning of the second line.

1.12 All formulas occupying separate lines are numbered within the section they are related to. The numbering of the formula consists of the section serial number and the serial number of the formula separated with a point. For example, “formula (2.7)”.

The serial number of the formula is typed in Arabic numerals in parentheses at the right edge of the line. References to the serial number of the formula occurring in the explanatory note text should be given in parentheses with the obligatory indication of the word “formula”. For example:

Substituting the formula (3.6) into the formula (3.2), we get ...

1.13 Any formula should be accompanied by a list and symbols given in the formula decoding (unless explained earlier).

The list begins with the word “where” and is stated with a new line without a paragraph indentation. The word “where” is not followed by a colon. The same line contains the first explanatory symbol. Symbols must be separated from the decryption by a dash aligning the list with symbols. A semicolon terminates each decoding. The dimension of the symbol or coefficient is indicated at the end of the decoding and is separated by a comma. For example:

When the image is scaled the following expression is used on the mobile device display:

$$L_{img} = \left( L_{original} \cdot \frac{k}{d_{device}} \right), \quad (2.3)$$

where  $L_{image}$  – is the displayed image length, pixel;  
 $L_{original}$  – the original image length, pixel;  
 $k$  – the coefficient selected by the user;  
 $d_{device}$  – the diagonal of the device display, mm.

1.14 Each illustration should be accurate, clear in meaning and relevant; it should be placed as close as possible to the clarifying part of the text. It is acceptable to place illustrations at the end of the explanatory note in the form of an appendix.

1.15 All illustrations, regardless of their type and content, in the technical literature are called figures.

Each figure is accompanied by a caption. The caption contains the word “Figure” without abbreviation, the serial number of the illustration with Arabic numerals and the name of the figure, for example:

Figure 2.7 – Controller Class Data Input Processing Diagram

where “2” – is the number of the section, “7” – is the sequence number of the illustration in the section, and “Controller Class Data Input Processing Diagram” – is the name of the picture.

1.16 Tables are used to simplify the presentation of the text containing sufficiently large volume of material in order to give this material a more compact and convenient for analysis form.

1.17 All tables in the text should be numbered and headlined. The table number and the title are separated by a dash. The word “table” is typed at the level of the table left border.

The table, together with the headline, is separated from the previous and the following text by a white line. A white line does not separate the headline and the table.

An example of a table:

Table 2.1 – Table headline

					}	Column Headline
					}	Column Subtitle
					}	Lines

1.18 The column “Order number” is not included into the table.

1.19 The explanatory note appendix should contain the reference information or that of secondary importance, but which is necessary for more detailed coverage of the project topic; it may contain individual materials (printouts of programs, etc.) in order to make the work with the explanatory note text more convenient.

All appendixes include a general page numbering.

1.20 The appendices are denoted by uppercase letters of the alphabet starting with A. If the explanatory note contains one appendix only it should also be indicated as Appendix A.

Each appendix starts with a new page. At the top center of the page the word Appendix and its letter designation are typed in capital letters. In the center below the title typed in a capital letter is placed.

1.21 References, normative, technical and other documentation used in the work on the thesis project is placed at the end of the explanatory note before the appendix in the form of a list of REFERENCES, which is typed in capital letters at the center of a new page.

2.1 Graphical part of the thesis project should be presented on separate sheets of A1, A2, A3 or A4 size.

2.2 Schemes represent the main graphic material of the thesis project. They are performed in vector graphics editors and must be printed with clear lines and figures without any signs of raster processing. Their realization must be up to standards.

2.3 UML and IDEF diagrams are recommended to be used as the graphic material.