

ABSTRACT

The structure and the volume of the work. Explanatory note to the diploma project consists of 5 chapters, contains 17 pictures, 21 tables, 1 complements, 18 sources.

Diploma project is dedicated to the development of a web-resource to automatic processing and systematization of the news. The objectives of development: web-site that allows to monitor the work of the mass media. The tasks of the development are next: collect information from various news sources, forming collections of news by a common theme that they cover.

In the chapter of general terms a software environment was described. Specifically an activity process and functional model was described; analogues were examined and objectives and tasks of the program development were defined.

In a chapter of information support an input and output data were collected and the structure of database was described.

The chapter of math support is dedicated to the mathematical formulation of the problem, which solved in program development.

The chapter of software development includes development tools, as well as the diagram of classes, sequence components and specification of functions.

In the technology chapter user manual, installation and product testing was described.

**WEB-RESOURCE, SYSTEMATIZATION, NEWS, TOPIC MODEL,
NON-NEGATIVE MATRIX FACTORIZATION, NMF,
MULTIPLICATIVE UPDATE RULES.**