

Source of financing	grant funding of young scientists for scientific and (or) scientific and technical projects for 2023-2025 (Ministry of Science and Higher Education of the Republic of Kazakhstan)
Priority directions	Information, communication and space technologies
Specialized scientific areas	4.4 High-performance computing technologies: 4.4.5 Information retrieval systems; Research in the field of engineering and technology (Computer science and informatics; Artificial Intelligence). Applied research
IRN of the project:	AP19577922
Name of the project:	The technology of creating an intelligent question answering system in the Kazakh language
Project Manager	Assel Mukanova, PhD
Implementation deadlines	2023-2025
Relevance (briefly)	The relevance of the research is confirmed by the fact that intelligent question-and-answer systems are actively developing now, combining the properties of search, reference and intelligent systems and using natural language interfaces.
Purpose	Development a technology for creating an intelligent question-answering system (IQAS) for a given subject area with the possibility of conducting a written dialogue in the Kazakh language, taking into account not only linguistic, but also semantic information contained in the subject area.
Expected Result	1. An ontological model of the subject area, a thesaurus of the subject area, a text corpus of the subject area in the Kazakh language, reference questions and answers to them; Semantic models of morphological and syntactic rules of the Kazakh language in the formal metalanguage; Databases of normalized classified template and analyzed template questions and answers; 2. Algorithms and programs for normalization, classification of morphological, syntactic and semantic analysis of the question posed; 3. Architecture, knowledge base structure and data communication schemes, IQAS user interface, IQAS subsystem function specifications, programs of all IQAS subsystems, databases of reference questions and answers, as well as algorithms and programs for searching keywords in the ontological model of the subject area, relevant documents containing fragments of the answer, extracting answers from knowledge base and placement of template questions-answers to the newly posed question and the answer to it into the database.
Target consumers of the results obtained	The target consumers of the results obtained will be individuals regardless of their gender, nationality, age, citizenship, place of residence, social status, place of work, etc., who speak the Kazakh language and Internet skills, as well as legal entities regardless of the form of ownership, form of organization, subject of activity, location and jurisdiction.