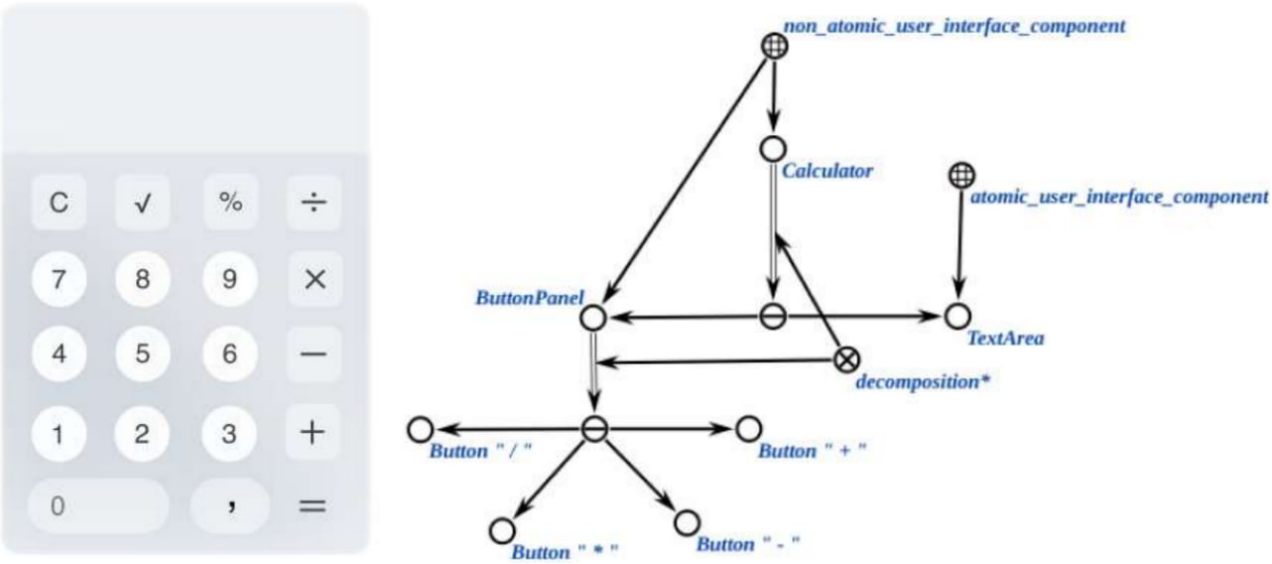

Figure 1: Example of a description of a user interface component

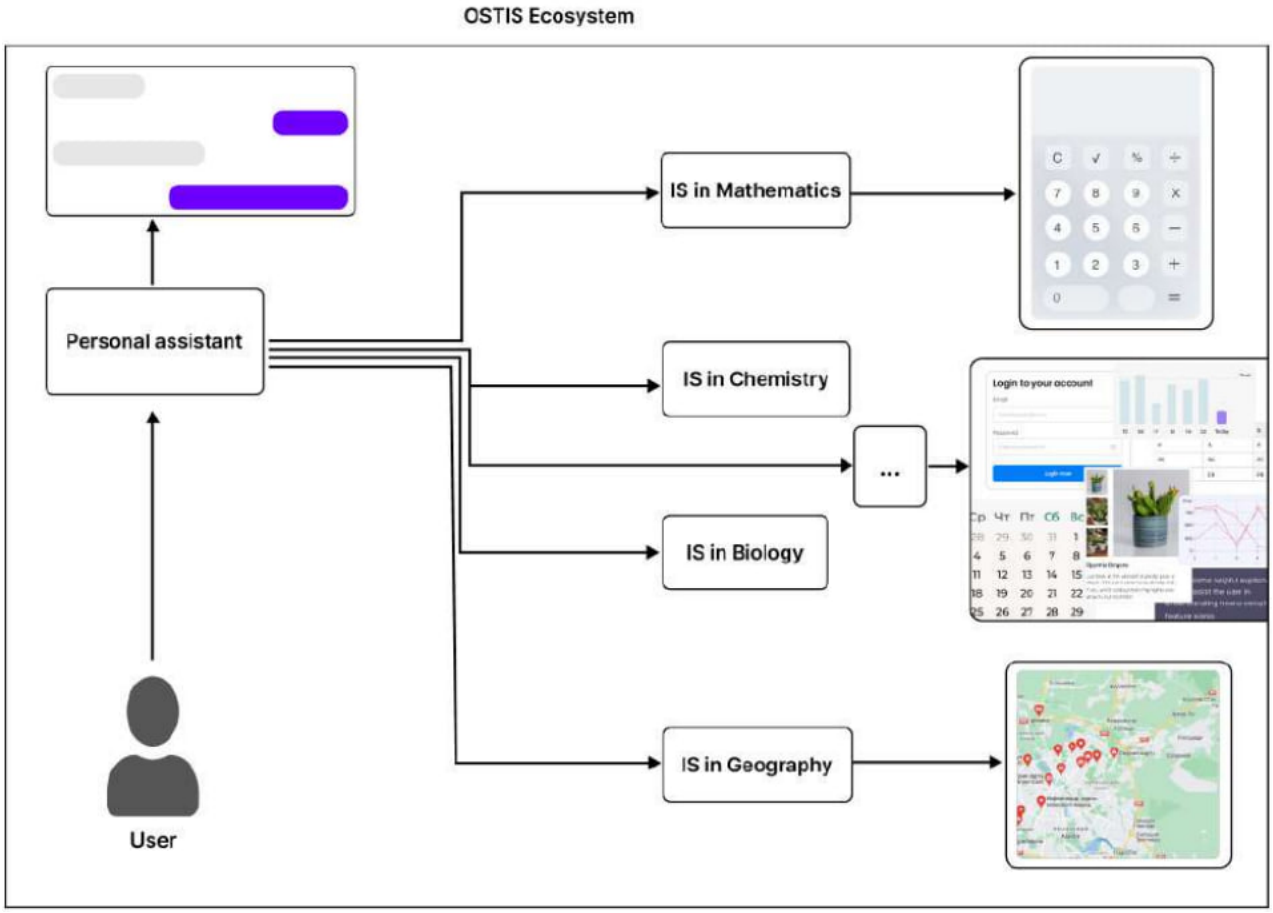

Figure 2: Components of the user interface of the OSTIS Ecosystem

A unique feature of the *OSTIS Technology* is ensuring the compatibility for the *components of ostis-system knowledge bases*, *ostis-system problem solvers*, and *ostis-system interfaces* due to a single unified formal basis. Thus, a *user interface component* for its work must usually include not only a description of its visual characteristics in the *knowledge base* but also *components of the problem solver* (for example, *sc-agents*), as well as the necessary fragments of some *subject domain*. So, in Figure 3, fragments of the *interface components*, the *problem solver*, the *knowledge base* for the "calculator" *user interface component* are represented in the *SCg-code*.

In the demonstrated Figure, the representation for the *operator of the sum of two numbers* and a fragment of the *Subject domain of numbers and numerical structures* necessary for the operation of the "calculator" *component* is displayed. Due to the unified representation of all the necessary parts, such a *component* can be easily integrated into any *ostis-system*, including the *personal ostis-assistant system*.

IV. Conclusion

Within the article, the problem of usability of information services and systems was considered. Their existing diversity requires additional efforts from users to explore their features and gain interaction skills.

To solve this problem, relevant works on the use of *personal assistants* were considered. It was concluded that in addition to using *personal assistants*, it is necessary to ensure the compatibility of various services and systems, which can be implemented by creating an *ecosystem* of *semantically compatible systems*.

An approach was proposed, which assumes the use of the *OSTIS Technology*, which includes the *OSTIS Ecosystem* and *personal ostis-assistants* to ensure effective and comfortable user interaction with the *ecosystem*.

Within the proposed approach, the *user interface of the OSTIS Ecosystem* is considered as the *user interface of a personal ostis-assistant*, since the user interacts with the *ecosystem* only through their *personal assistant*. The principles of the *user interface of the OSTIS Ecosystem* were described, the main of which is the *component approach* to design and the possibility for a *personal assistant* to use any *user interface component* within the *OSTIS Ecosystem*.

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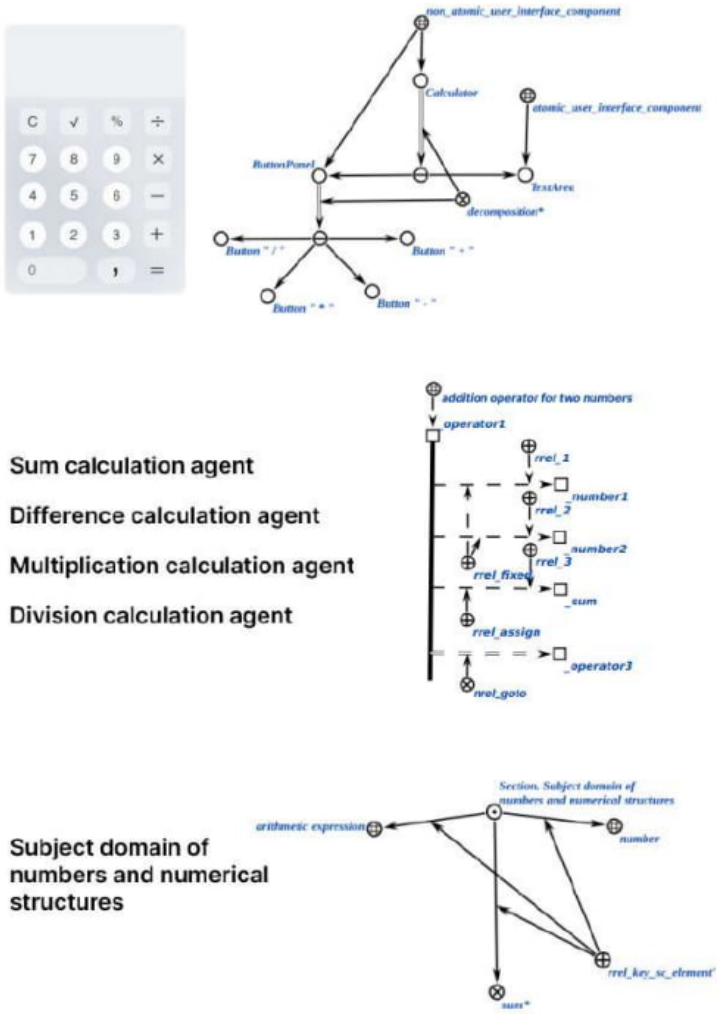

Figure 3: Components of the interface, the problem solver, and the knowledge base for the “calculator” component

Пользовательский интерфейс Экосистемы OSTIS

Садовский М. Е.

В статье рассматриваются принципы организации взаимодействия пользователя с Экосистемой OSTIS, понятие пользовательского интерфейса Экосистемы OSTIS, применение компонентного подхода к проектированию адаптивных интеллектуальных мультимодальных интерфейсов ostis-систем

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