TRAINING AND IMPROVING QUALIFICATION ON THE MODULE "INTRODUCTION INTO SOFTWARE ENGINEERING" WITH MOOC LECTORA SUITABLE Nurjabova D.¹, Berdiev S.²

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Abstract: in this article is devoted to training and improving qualification on the module "Introduction into Software Engineering" with mooc Lectora Suitable. The issue is considered about training and improving qualification on the module "Introduction into Software Engineering" with mooc Lectora Suitable. The MOOC system is aimed at gaining knowledge only on the initiative of the listener, and assumes a high degree of self-control and motivation.

Keywords: open source software, mooc with lectora suitable, free software.

The transition to Internet-based learning began in the 2000s in connection with the emergence of open Internet courses, when well-known world universities began to post free lectures. The demand for such educational services turned out to be extremely high, and in 2008, a fundamentally new method of education called MOOC (Mass Open Online Course) was formed [1, 4].

Open Stand<u>a</u>rd is a technological specification that is developed, maintained, and distributed in accordance with specific requirements. In the scientific community and in there is no full consent to the legislative practice of different states with respect to the notion of an open standard [1, 4].

These signs are as follows: the development and these of the standard is carried out by a specialized nonprofit organization in the course of a formalized procedure, participation in which is open to all interested parties; all those who wish have the right of unlimited copying, distribution and use of the standard; The open standard can not prescribe the use of closed or controlled by third parties technologies, patents etc. [1, 4].

Experience and competence of a large number of market participants, in the development and discussion of technology, determine the high quality open standards, ensure their proper implementation and support in the market due to the following advantages:

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Open standards ensure their proper implementation and massive support in the market due to the following advantages:

• Easy integration and high compatibility (interoperability),

• Characterizing the use of open standards for intersystem and intercommoning interaction, drastically reduce the cost of implementing new systems.

• Ability to select different implementations of the open standard and their compatibility creates the user's independence from a particular vendor. This, in turn, helps to reduce the cost software products that implement an open standard, as independent (competing) implementations of standard technology become possible.

• Due to the use of open specifications, investment risks are reduced, as the user has the opportunity in case leaving his supplier from the market (or changing his licensing, technical, financial policies) with minimum costs to turn to the services of another supplier [1, 4].

• When choosing an open standard, the user is protected from legal risks associated with possible changes in the licensing or patent policy of the owner of non-standardized technology and its only implementation.

• The user acquires more flexibility in the product selection, so as it has the ability to choose that implementation of the open standard, which most fully corresponds to his individual, needs and needs.

How state information systems are implemented interaction of the state with citizens and organizations, the actual availability of state information resources and services depends, as well as the cost of funds required for electronic interaction with the state. For example, you should avoid the requirements for using any software on the client computer in addition to the web browser.

The availability of client software complicates the maintenance of government information systems, limits the user's choice of software, and often requires the use of technologies from a specific manufacturer. A web browser is the most preferred way to organize a user interface and for government information systems. The tools of the web browser today allow you to access to fairly complex services (for example, Google Maps, Google Docs &Spreadsheets) [2, 3]. When implementing the client interface, it is necessary to turn off non-standard browser extensions and use a multi-platform functional set based on the open ISO /IEC 15445: 2000

(HTML). The requirement that a citizen and organization have enough of a standard browser to access the electronic services of the state is common in most developed (and even developing) countries of the world. Equally important for citizens is the possibility of obtaining state documents and data in open formats. For example, in the case of electronic documents, this may be the ODF mentioned above, which leaves for the user the right to choose a program for working with files and does not force them to buy expensive programs from a single provider (or access to pirate market services) [2,3].

The use of open standards in Uzbekistan solves other problems and is directed to other objects than the standardization envisaged. In this regard, new regulation should appear, complementing the current legislation in the field of standardization, which will determine the procedure for the use of open standards when creating state information systems [2, 3].



Fig. 1. Interface of mooc on the module "Introduction into Software Engineering"

Based on the analysis of the most effective systems regulating the use of information technology in the government of foreign countries, one can single out the general principles of such regulation[2,3].

• To limit the number of information technologies used catalogs of "basic specifications" are used, ensuring the availability of public resources for citizens and the absence of technological discrimination.

• The degree of mandatory use of basic specifications is determined by the status system, with priority being given to open standards that have been recognized by market participants.

• Existing regulatory systems are aimed at:

- Ensuring technological neutrality (absence of coercion to use the products of specific suppliers);

- Ensuring the compatibility of information systems with automatic interaction;

- The exclusion of preferences for any products of individual products drivers through discriminatory technical, licensing, financial and other requirements;

- Openness of the regulatory process, including develop standards that are used in it.

It is the use of open standards that all these requirements. State regulation also usually establishes common principles of use and interaction with those inherited which to some extent do not correspond to the regulation. Regulation usually allows use of "retiring technologies", but determines in their attitude migration policy. The GPL license also includes a condition specific to the contract of instruction, involving the establishment of a legal relationship between the original right holder and subsequent users, bypassing the distributor[2,3].



Fig. 2. Special code of mooc on the module "Introduction into Software Engineering"

References

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