

DEVELOPMENT OF THE WEB APPLICATION FOR LOST ANIMALS SEARCH

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The problem of searching for lost animals has existed for quite some time, but with the start of a full-scale war in Ukraine, it has reached a new level. This paper discusses the development of a web application for finding lost animals.

According to various studies, on average, 30% of domestic animals get lost during their lifetime [1]. It is difficult to estimate the number of homeless and lost animals in Ukraine, as there are no official statistics. According to the Washington Post, there were 7.5 million homeless animals in the country [2], and as of 2023, this figure has only increased. The "Right to Life" fund [3] reports that since the beginning of the war, more than 200 abandoned pets have been evacuated only from active combat areas. Overall, the number of animals in shelters has increased by 20-30% in regions far from the combat zones and by 100% in the front-line areas [4]. One of the most promising areas of software development at the moment is web applications. The main advantage of web applications is that they can be accessed from any Internet-connected device without the need for additional software installation. In addition, they can be updated centrally on the server, which simplifies version management and provides higher security, since data is stored on the server rather than on the user's device. According to research, web applications perform 36% better in attracting and retaining users compared to native applications [5]. The web application can work on any platform. The client-side is implemented using HTML5, CSS3, and JavaScript. The Node.js platform is responsible for the server-side. MS SQL Server was chosen as the database.

The web application provides three user roles: guest, authorized user, and administrator. With the help of the web application, a guest can view advertisements about found and lost animals, register a user account, or log in if there is already one. The filtering criteria for convenient advertisement search include the settlement, animal species, advertisement type, date, and animal gender. There is also a function to search by the animal's microchip number. An authorized user can create advertisements, add comments to existing ones, view personal information, and edit it. The administrator can delete users and comments.

References:

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