## ABSTRACT

This project aims to develop a web-based system that facilitates the search for the optimal public transport route in Gomel: thesis / Gomel: GSTU in. BY. Sukhoi, 2023. - Thesis: 93 pages, 15 figures, 15 tables, 24 sources, 4 appendices.

The system involves creating a database using Entity Framework Core to store data about routes, streets, and stops. The database is populated with relevant information obtained from reliable sources. The user interface is implemented using React and Bootstrap, providing a responsive and user-friendly experience for searching routes and accessing route details. A server-side API built with ASP.NET Core handles user requests and retrieves data from the database. A search algorithm is implemented, considering factors such as location, time, and traffic conditions, to determine the best route. The system aims to improve the efficiency and convenience of public transportation in Gomel by assisting users in finding the optimal route for their travel needs. The practical significance of the developed application lies in the possibility of its application in practice in real conditions.

The graduate student confirms that the thesis work was done independently, the material given in the thesis objectively reflects the state of the object being developed, the explanatory note was checked in the Antiplagiat system (https://www.antiplagiat.ru/). The percentage of originality is 73.57 percent. All theoretical and methodological provisions and concepts borrowed from literary and other sources are accompanied by references to the sources indicated in the "List of used sources".