DATA ANALYSIS AND MONITORING RESULTS IN THE SUMO GUI SOFTWARE, TECHNOLOGY OF RECEIVING INFORMATION TO MANAGEMENT SYSTEMS

Akhmedov Husanjon Mamirdjanovich
akhmedovkhusanjon418@gmail.com
teacher, Andijan State University.
Hakimov is the son of Bakhtiyar Muzaffar
b_hakimov@adu.uz
student, Andijan State University.

Abstract: *In order to implement simulation processes in the visualization of transport routes, data analysis and monitoring results are studied, and information is provided about the technology of obtaining information to control systems.*

Key words: *Input interface, graphical interface, user interface, configuration interface, communication protocols, transmission interface, data exchange, communication, real-time communication, system integration, database.*

INTRODUCTION

It is the implementation of innovative, effective and productive skills using IoT systems in the study of data analysis and monitoring results and traffic control.

Sumo GUI (Graphical User Interface) software is a program that provides a user-friendly interface for data analysis, monitoring, and tracking. It allows you to analyze data, support settings and study monitoring results. The Sumo program is a program designed to study the treatment and management of transport and road equipment. It allows you to model cars, buses, trucks, bicycles and other vehicles and analyze their traffic.

For data analysis, the Sumo GUI allows you to get data that shows the periodic state of the transport model, its movements, speed, average distance to external objects on the road, etc. By analyzing this data, you can study the traffic on the transport routes, determine the peak load time, analyze the total traffic situation, etc.

The Sumo GUI provides information for monitoring the operation mode of the transport model to study the monitoring results. It allows you to track the time, speed, location of vehicles, traffic conditions, etc. You can use these monitoring results to transfer traffic to management systems.

Sumo's GUI interface provides convenient ways to view data, change settings, and analyze results. You can choose the data you need, ulSumo GUI software provides the following options for data analysis, monitoring and tracking:

Data Analysis: Sumo GUI allows analysis of traffic model data. This information includes the movement of the vehicle, speed, distance to external objects on the road, etc. You can analyze traffic patterns, traffic conditions, and other analyzes by studying this data.

Settings support: The Sumo GUI allows you to change the settings of the transport model. You can change the structure of the road, the characteristics of the vehicle, the signaling system and more. By changing these settings, you can customize the analysis and monitoring results to your liking.

Monitoring Results: The Sumo GUI provides monitoring results to monitor the operation mode of the transport model. You can monitor the movement of the vehicle, speed, location on the road, traffic conditions and more. Using the results of such monitoring, you can transfer traffic to control systems and make the necessary decisions.

Data transfer to management systems: Sumo GUI, analysis and monitoring natSumo's GUI interface provides convenient ways to view data, change settings and analyze results. You have the opportunity to select the data you need, analyze it using them, and exchange monitoring results with management systems. For more information about the Sumo program, you are encouraged to refer to the official Sumo website. This site may contain tutorials, examples, and reader libraries on how to install and use the software.

In Python, the input() method is used to accept user input.

For example:

Python

```
username = input("Enter username: ")
print("Username is:", username)
```

Code, sozdannyy II. Please read carefully and use it. Dopolnitelnye svedeniya o often zadavaemyx voprosakh.

This code prompts the user for a username and displays the name they entered1.

In Java, Scanner class is used. For example:

Java

```
import java.util.Scanner;
public class Main {
public static void main(String[] args) {
Scanner myObj = new Scanner(System.in);
System.out.println("Enter username:");
String userName = myObj.nextLine();
System.out.println("Username is: " + userName);
}
}
```

This code prompts the user for a username and displays the name they entered2.

In C++, the variable cin is used. For example:

```
#include <iostream>
using namespace std;
int main() {
string username;
cout << "Enter username: ";
cin >> username;
```

```
cout << "Username is: " << username << endl;
return 0;
}
```

This code prompts the user for a username and displays the name they entered.

References:

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