Decision Structure

Decision structures are an essential part of programming, allowing the programmer to control the flow of their program based on specific conditions. In C#, decision structures are often used to make decisions based on input from the user, database records, or other sources. This paper aims to provide an overview of decision structures in C#, including the different types of decision structures, their syntax, and examples of their use.

Types of Decision Structures

There are three types of decision structures in C#: the "if" statement, the "if-else" statement, and the "switch" statement.

The "if" statement is used to execute a block of code if a condition is true. The syntax of an "if" statement is as follows:

Text

Description automatically generated with medium confidence

The "if-else" statement is used to execute one block of code if a condition is true and another block of code if the condition is false. The syntax of an "if-else" statement is as follows:

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The "switch" statement is used to execute a block of code based on a specific value. The syntax of a "switch" statement is as follows:

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Examples of Use

Here are some examples of how decision structures can be used in C#:

Example 1: If statement

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In this example, the program will output "x is less than 20" since the value of x is less than 20.

Example 2: If-else statement

A screenshot of a computer

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In this example, the program will output "You are an adult" since the age variable is equal to 25, which is greater than or equal to 18.

Example 3: Switch statement

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In this example, the program will output "Today is Wednesday" since the day variable is equal to "Wednesday".

Summary:

Decision structure is an essential part of programming in C#. By understanding the syntax and functionality of the different types of decision structures, you can create more efficient and effective programs.