



**Promoting concrete algorithm for implementation in computer system
and data movement in terms of software reuse to generate actual values
suitable for different access**

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Abstract

The construction of functional algorithms by a good line and programming, open new routes and in the same time increase the capability to use them in the Mechatronics systems with specific and reliability system for any practical implementation and by justification in aspect of the economy context, and in terms of maintenance, making it more stable etc. This flexibility is really a possibility for the new approach and by makes the program code an easy way for updating data and In many cases is needed a quick access method which is which is specified in the context of generating appropriate values for digital systems. This forms, is opening a new space and better management to manage a respective values of a program code, and for software reuse, because this solution reduce costs and has a positive effect in terms of a digital economy.

Keywords: Algorithm, software reuse, program code, computer, analog, digital.

1. Introduction

To make a good system that must be a functional and well structured system is requiresbasic knowledgein relevant programming languages and relevant communications systems. In this paper are presented the method to determine



fictitious values during the recycling in the area of communications and computer systems with advanced access, and updating the values. Obviously, the incorporation of certain sequences within certain levels provides flexible access to certain parameters [1]. One of the best options is access, and to update options to certain values all of those things is to achieve a certain digital controls. In telecommunication systems is very important a delay time, sometimes this value should be very small, or indistinct, but sometimes this delay time can be fictitious for certain destinations in the acceptance and delivery of certain values.

Many communication systems are based on the algorithm that allows special access. This approach has set the path for the realization of rapid communication. Although errors can occur any time, always preferred to create more secure communications and sophisticated. In this paper is presented a restructuring under a certain model and was given advanced programming approach in terms of creating the model and the possibility of expanding the scope and implementation. To make this clearer the results are given and are explained aspects of their priority due to highlight the effects and put comparative values in terms of their development.[2][3]

2. Program code for processing on the basis of the software reuse perspective

Sometimes it is very difficult to find numerical values appropriate for efficient communication in a certain channel. But, using the programming this activity can simplify the procedure of creating adequate access to various systems. In the context of command, this procedure creates the appropriate channel for the movement of information, because the movement of data referred to the program can be connected with module, or any interface for any other access for practical destinations.



The aspects of the generations of the appropriate values with digital-analog and analog-digital conversion, by use the program code, can simplifies all the association work; because there is no need for additional modules, and procedures, command and conversion modules and all these things increase a complexity of using for practical implementation.

Program code for processing on the basis of the software reuse perspective can be simulated by,

```
#include <iostream>
#include <Windows.h> //include the possibility, for using the Sleep()command
using namespace std;
int main()
{
    int n,i,B[8]={4,8,16,32,64,128,256,512}; //the vector
    int number,BIN[11],digit=-1; //
    float m; //
    cout<<"\nGive the value(seconde) for time delay!"<<endl;
    cin>>m;
    cout<<" m = "<<m<<" sec "<<endl<<endl;
    cout<<"\n Give the number, (how many time to be repeated-recycled)"<<endl;
    cin>>n;
    cout<<"n = "<<n<<" time "<<endl;
    while(0<n)
    {
        for(i=0;i<=7;i++)
        {
            cout<<"\n B["<<i+1<<"] = "<<B[i]<<endl;
            Sleep(m*1000);
            number=B[i];
            while(number>0)
```



```

        {
            digit++          BIN[digit]=number%2;
            number=number/2;
        }//conversion dec->bin
        cout<<"The respectiv binary number is ";
        while(digit>=0)
        {
            cout<<BIN[digit];
            digit--;
        }
        cout<<". "<<endl;
        digit=-1;
    }
    cout<<"\n-----" <<endl;
    n--;
}
cin.get();
cin.get();
return 0;
}
    
```

Table1: Decimal number and their binary equivalent –analog/digital

decimal equivalent	...	64	128	256	...
delay time (millisecond)	...	10	10	10	...
Binary equivalent numbers	...	1000000	10000000	10000000	...



All these numbers are binary-equivalent, and are suitable for generating the respective values of the context of digital economy, because this created optimal conditions for the construction of algorithms corresponding to different realizations, whether simulation or practical nature. These values are practical because they may soon be generated through the respective program and the same through various programs can be incorporated into networks and establish proper connection with software components. We can realize the respective algorithms, for any communications, according to a block-scheme, Figure 3. With the above program not only can achieve the appropriate simulation, but this program can be expanded and implemented as a successful communication with the relevant computer ports. Through computer ports, the interface may be implementing various communications, generating foreign values, values that have digital nature. These digital values are of type, 4, 8, 16, 32, 64, 256, 1024 etc, (their binary equivalent).

3. Opportunity to update values and the establish an communication

Why this communication is flexible, visible and clear for digital economy context? As we can see the figure 3, we can conclude that such values can be generated in different channels, which are previously defined. These values may be stochastic nature, but we identify in advance those values[5][6].

These values determined in the context of the algorithm. So these fictitious values, defined by the programmer create the possibility to include a certain channels, which are more flexible. The possibility of updating of these values and the establishing of communication, open an opportunity to do a “dimensioning” of communication, and also open the horizon for the practical implementation of this system.

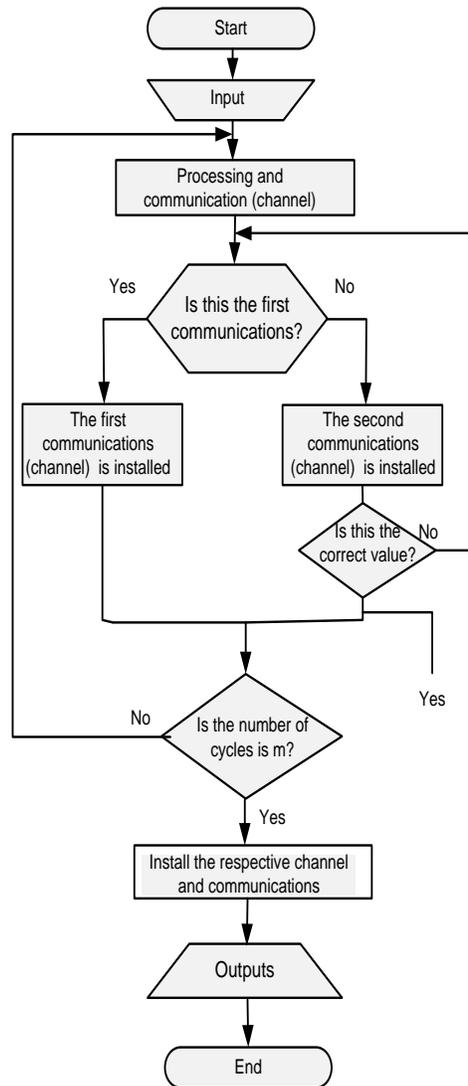


Figure 1. The block-diagram for implementation of respective channel communications

In the above figure 1, is described a procedures by algorithm, for the digital interrelationships and dependencies between emerging communication channels and, data

transfers along predefined channels and emerging platforms, and related contingencies, for e.g. these data movement can be implemented in the differently institutional and organizational entities.

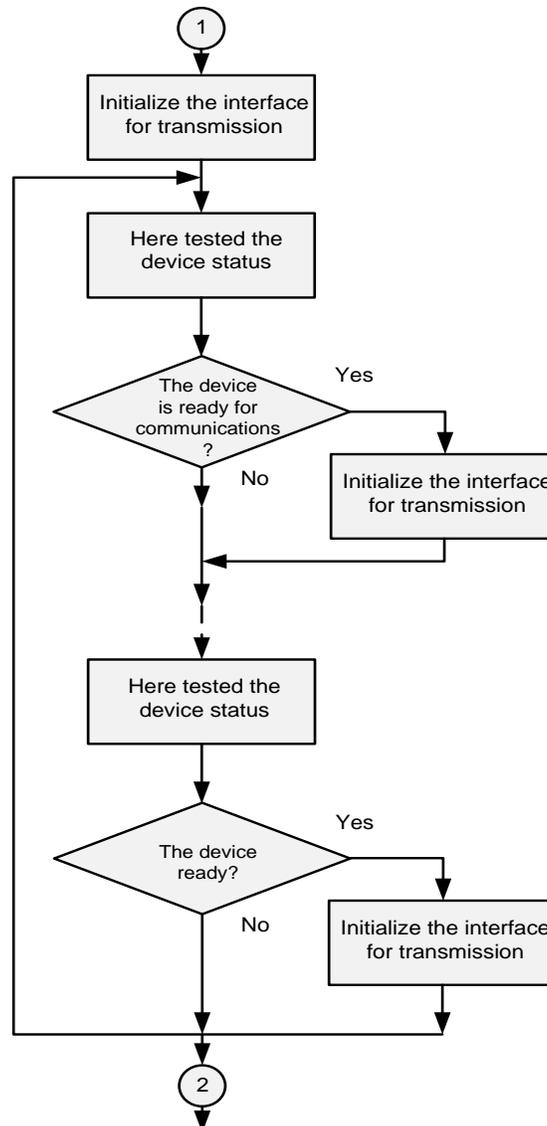


Figure 2. The part of block diagram to initialize the interface for transmission

4. The ways of testing and defining the direction for the implementation of the transfer during initialization of the interface

If we want to control any module, such as interface who can interact with any field element devices, or any mechatronic systems, firstly is needed to be supplied any timer, or any other switches in context of digital and binary logic system; we can create a better solution by using this system, by changing the value for example, every 10 ms or other values if there is needed by an consecutive order. The activity of the program should initiate any controller, using any networks and channel. The delay time can be realized with the program, in the form of loops, as the algorithm in Figure 2. The delay time, for above program code, used in this case create synchronization for the deterministic events.

Then, the I/O data transmission is the best method of transmission between any field devices or any Mechatronics system and computer system, Figure 3.

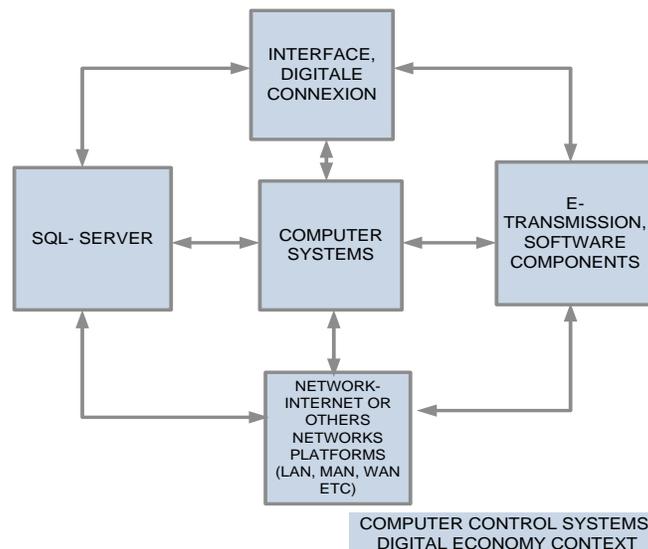


Figure 3. Computer control systems

Conclusion

The objectives of the paper present and realize a perspective method; a method for finding appropriate values, deterministic values and transmission of the data by certain channels. By use using a interface, which is controlled by program code, who can be a part of any software reuse aspect, enable a possibility for data movement in the context of better management system, or computer technologies, which is a very flexible for implementation especially in the context of the digital economy. The flexibility of the program enables easy and very respective data updating, and reduces costs, because of the positive effect in terms of access and generally in the aspect of the remote access. The algorithm is basis who can realized a program code, especially all other procedures can be reliable, and can be part for other implementation especially in the context of the practical computer system who can manage differently resources.

Often due to practical needs, required the need of getting the data movement through the appropriate algorithm to fill in the optimal way.

These values can always be deterministic for external interface, and always can be used as a certain generation of values, according to a specific domain. This method entails the extension of the current system versus research perspectives in the context of programs, models and restructuring in line with other hardware or software development. These values are fictitious because they can be easily modified and adapted.

These values are practical because they can be soon generated through the respective program and can be incorporated into networks, establishing a connection with software components.



The adaptation is about the ways of communication channels in certain computer ports, and connection with external equipment. By using this system facilitated the management of channels communications.

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