ПЕДАГОГИЧЕСКИЕ НАУКИ

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OVERVIEW OF THE VB HELP SYSTEM

Summary. This article dedicated to learning how to create effective software systems using all the capabilities of the Algorithmic Language.

Key words: Costants, Data Types, Directives, Events, Functions, Groups, Indexes/Lists, Methods, Miscellaneous, Objects, Operators, Properties, Statements.

Annotation: Enter the word or words that are relevant to the article you are looking for and search it in all information books. This is aimed at visualizing the processing of articles found in search terms, or finding the article in advance, knowing in which book or category the article is looking for.

Purpose: As the economic growth in the country causes serious demand for professional programmers, I aim at bringing an increased interest amongst young people and help our young people learn this profession.

Literature devoted to Algorithmic languages and computer systems in general gives little thought to the teaching of the Help sub system. We think, this is not the right approach. It is necessary to use all opportunities provided by Algorithmic Language to create efficient software systems.

We can use the Help system in two ways:

1.To obtain necessary information necessary for programming

2.In order to create customized Help systems for the software

The Help Alt system (we are talking about the VBA help system) is a collection of all VBA technical documentation and is widely used by programmers and consists of 3 reference books.These books have a specific structure and provide all the information needed by a software developer with Excel and VBA. If, for any reason, the answer is not found in these reference books or does not satisfy the programmer they can contact the local or Web resources of MSDN (Microsoft Developers Network). Here you can find answers to almost all questions about VBA.
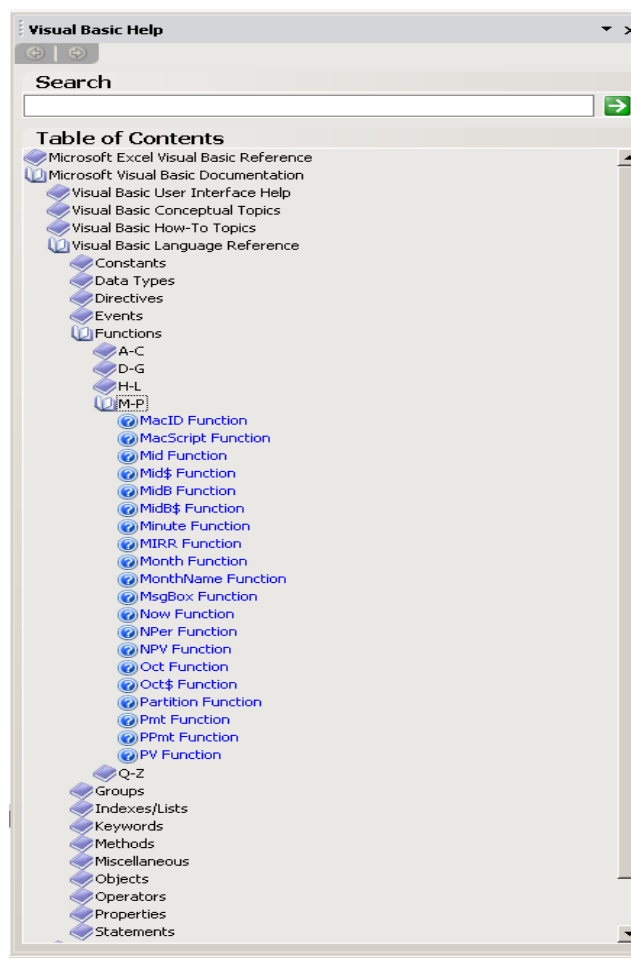
The last structural unit in the Help system is called the article. The main objective in the actual Help system is to search for articles that is interesting to us and use them as we write initial codes or customize the program. In order to find the articles you need, you need to use one of two methods:

-Add word and words related to the article to the search field to search for all information books. Visual processing of articles found in search bar.

-Or finding the article in advance, knowing which book or category the article belongs to.

Below are three reference books of the VBA editor help system opened by two levels. Each book consists of categories and articles. All articles contain reference to necessary information.

Microsoft Excel Visual Basic Reference

As mentioned before, VBA is a subset of VB algorithms and is used in various TPSs, including MsOffice. Most of MS Office software has been created through Object Oriented Programming (OOP) and is composed of Object Components. Each mode in these systems is the method of a particular class, and the parameters are the features of the classes. Unlike other modern algorithmic languages, open codes of these classes are not revealed by Microsoft. Basically it is impossible to fully implement the OOP. For example, it is impossible to create a class based on the existing class, changing the methods and reloading, etc.

The help system book describes how to work in VBA with only MsExcel object components. Here are some examples:

1) Sub e_ActiveWorkbook()
2) Debug.Print ActiveWorkbook.name
3) Debug.Print ActiveWorkbook.ActiveSheet.name
4) ActiveCell.Range("B10") = "My cell"
5) ActiveCell.Range("C5", "E15") = "My other cells"
6) Debug.Print ActiveCell.Range("D12")
7) End Sub
Comment;
Print the name of the active book in Line 2
Print the name of the active page in Line 3
Insert My Cell text in B10 cell
Line 5 will place My other cells in C5: E15 cells
Line 6 prints the information in the cell D12 of the active page, and so on

This book covers articles related to the Excel object in the following categories:

collection
asset
method
features
action etc.

Microsoft Office Visual Basic Reference

This help system book contains the VBA components designed to help you connect with in line and office applications.

For example, the following are the initial procedural codes for searching the files we need through OP:

```
Sub e_FileSearch()
Set fs = Application.FileSearch
With fs
LookIn = "d:\vts"
FileName = "*.doc"
If .Execute(SortBy:=msoSortByFileName, _
SortOrder:=msoSortOrderAscending) > 0 Then
MsgBox "Total "& .FoundFiles.Count &" not found."
For i = 1 To .FoundFiles.Count
MsgBox .FoundFiles(i)
Next i
Else
MsgBox "File not found."
End If
End With
End Sub
```

Microsoft Visual Basic Documentation[1]

This help system book is purely belongs to programming and it can be used in any TPS which is integrated to VBA. That is, the initial program codes created solely on the information provided here will work correctly in other TPSs. The categories most commonly used in this book are Visual Basic Language Reference and Microsoft Forms Visual Basic Reference.

Visual Basic Language Reference has below groups:

Costants
Data Types
Directives
Events – OOP- events
Functions
Groups – Here functions, operators are gathered based on specific topics
Indexes/Lists -Here are keywords, keyword notifications are gathered under certain topics specific topics
Keywords
Methods
Miscellaneous
Objects
Operators
Properties
Statements

Information from other categories which is stored in reference book is used by programmers from time to time.

Categories for Help system

In Help system all information /articles are grouped into appropriate categories. In each category, articles are sorted according to English alphabetical order. Below is a list of the main categories of reference books and I'd like to share just the category names with you.

Microsoft Excel Visual Basic Reference

Microsoft Excel Object ModelWhat's New

o Programming Concepts
o Collections
o Objects
o Methods
o Properties
o Events
o Enumerations

Microsoft Visual Basic Documentation

o Visual Basic User Interface Help
o Visual Basic Conceptual Topics
o Visual Basic How-To Topics
o Visual Basic Language Reference
o Visual Basic Add-In Model
o **Microsoft Forms Visual Basic Reference**
o **Microsoft Office Visual Basic Reference**
o Microsoft Office Object Model
o What's New
o Programming Concepts
o Collections
o Objects
o Methods
o Properties
o Events
o Enumerations

Articles of Help system

As we mentioned, the Help system is cascaded into categories and category or sub-categories are complemented by the articles. Each article contains relevant information as well as the refernce to other related information. The structure of the articles in this way allows you to get comprehensive information on the topic.

Now, let's look at the practical implementation of the foregoing examples of how MsgBox information is extracted by using Help system.

I method:

In order to get all necessary and unnecessary information about MsgBox enter the MsgBox keywords to assist in the "search" field. The result is in a window that contains a large list:

Don't be scared of the scale of articles!!! In the window you will see the headings of all articles containing the word msgbox. This is a fairly large list (100 articles !!!). But Help is a "smart" system.Initially it places headlines of the articles directly related to Msgbox on top of the list. In the first line of this list, MsgBox Function (Visual Basic for Application) is the title of the article we need.

Because we are looking for the main article about the MsgBox function, which is the VBA function. As the MsgBox Constants (Visual Basic for Application) article is only about the constants, we are not interested in this article yet. Of course, by typing the search keywords more accurately, such as "msgbox function Visual Basic," we can narrow down the search list and get a more optimized list.

II method

We need to go through below steps in order to get the list of articles about MsgBox function:

1. Enter the sub category Microsoft Visual Basic Documentation –>Visual Basic Language Reference ->Function -> M-P alt

2. and choose the MsgBox related line from the list (left click)

Here is the window where MsgBox function article locates
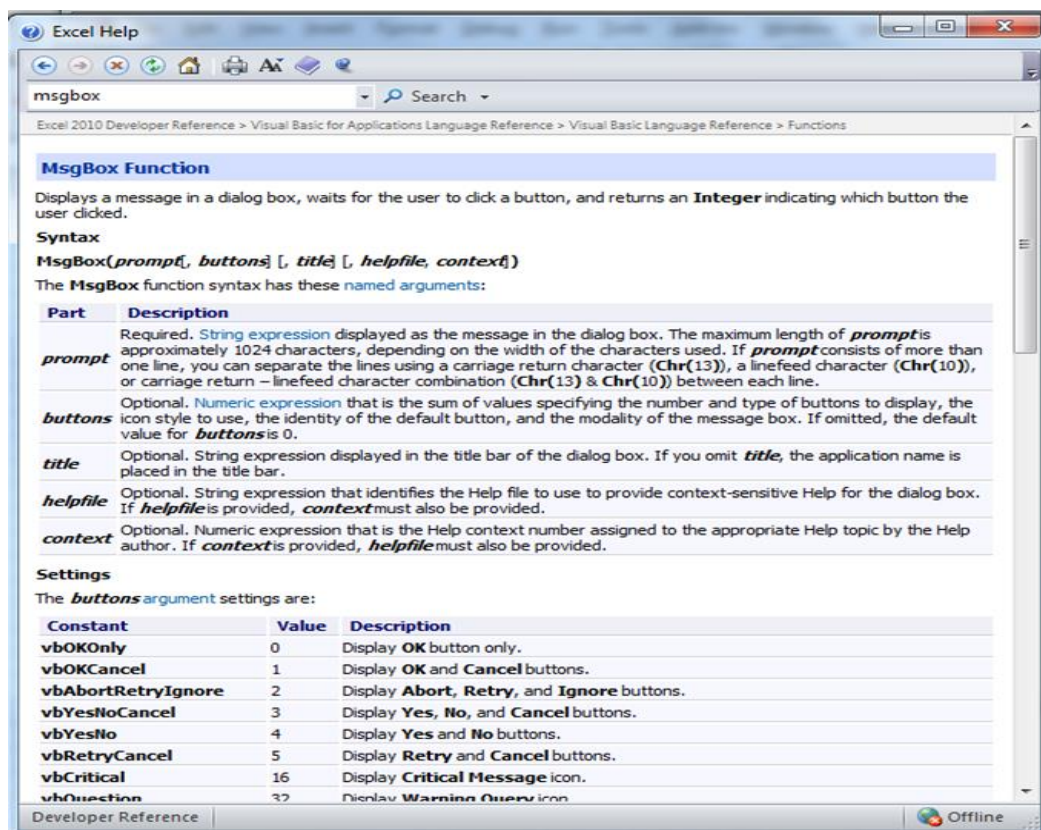
There might be a number of information blocks on the page

- **MsgBox Function**
- **SeeAlso**
- **Example**
- **Specifics**
- **Remarks**
- **Note –**
a. **Properties**
b. **Methods**
c. **Events**

Some blocks may also provide references within the text. These references are intended to link to other articles related to an active article, and to provide more complete information to the user. It should also be noted that it is not necessary that all the articles contain all the blocks.

Calling Help system from the source code window

During the collection of source codes one of the sub systems of VB Intelli Sense helps a lot to programmer. So, after writing the first word of the embedded VB element (function, object, etc.), the next element of the syntax allowed by the programmer - argument, constants, object, etc. offers a selection from their lists. And the programmer can complete the source code without any further effort. It also gives you access to the Help system. For example, if you have problems with MsgBox syntax, arguments, constants, you need to move the cursor over that word and press F1. As a result, the programmer can download the necessary "MsgBox function" article and complete the source code based on the information contained there.

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CREATIVE THINKING IN TERMS OF INNOVATIVE DEVELOPMENT, BASED ON VYGOTSKY THEORY.

Abstract. In the age of information technology, it is very important to develop creative thinking in every way. This article explores the importance of imagination, the ways of its development in preschool aged kids. Studied the basic theories of Vygotsky, regarding children's imagination. On the basis of that theories, made proposals on the development of children's creative thinking in the conditions of innovative development.
Keywords: creative thinking, Vygotskiy, innovative development, imagination, thinking.

According to Vigotsky, one of the founders of child psychology, developing a sense of impression in childhood is important. The impression is not only for the creative profession, but also for the various aspects of life. In physics, it is also the result of the impression that comes from human thinking. For example, Newton's theory of relativity could not have been created without his foresight. Newton himself wrote about this in a number of letters.

The impression develops in every age in relation to that age. That is, it is a psychological and physiological condition that has not been shown to have the same effect on adults as children.

According to Vygotsky, the impression is very low on preschool children. But at the same time, because it is far from reality, it is full of wonders and miracles that are not typical on adults. It is only natural that this wealth will diminish with knowledge. For example, a boy who imagines a dinosaur flying through a window at the age of 3, has the necessary knowledge and vision to turn it into a museum exponate at the age of 12, not hearing about a model's dinosaur model and its history. But this does not mean that his ability to impress has diminished, but that knowledge-based impressions need to be developed.

The most important thing for kindergarten-age children is to create these fantastic, unbelievable impressions. It is this impression that can lead them to great research in the future. Every scientist, according to Ribo, begins to invent something in his imagination.