DEVELOPMENT OF TEACHING METHODOLOGY TO CREATE NOTEBOOK PROGRAM IN BORLAND C++ BUILDER ENVIRONMENT

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Annotation: *In the article To create notebook program in Borland C++ Builder environment . Sections and structures of the program.*

Key words: *C++ Builder, RichEdit component, SaveDialog component, OpenDialog component, SaveToFile function.*

Less space occupied by the program during operation results in faster operation of the program. These problems are achieved by reducing the number of variables in the program, or by reducing the size of the cells in which the variables are stored.

C++ Builder is a software product, a rapid application development (RAD) tool, an integrated programming environment (IDE), a framework used by programmers to develop. Software in C and C++ programming languages. It was originally developed by Borland Software and then by its CodeGear division, which is now owned by Embarcadero Technologies. C++ Builder combines a set of object libraries (STL, VCL, CLX, MFC, etc.), a compiler, a debugger, a code editor, and many other components. The development cycle is similar to Delphi. Most components developed in Delphi can be used without modification in C++ Builder, but the reverse is not true.

C++ Builder is available in four editions with increasing features and price:

Community: Available for free for one year but has a limited commercial-use license. Includes local database connectivity and some library source code.

Professional: Adds cross-platform compilation for macOS, (until version 10.2.2: iOS and Android requiring the purchase of the additional Mobile Add-On pack), more library source code, code formatting, and a full commercial license.

Enterprise: Includes the mobile target platforms and adds client/server database connectivity, Enterprise Mobility Services, and DataSnap multi-tier SDK.

Architect: Adds data modeling tools.

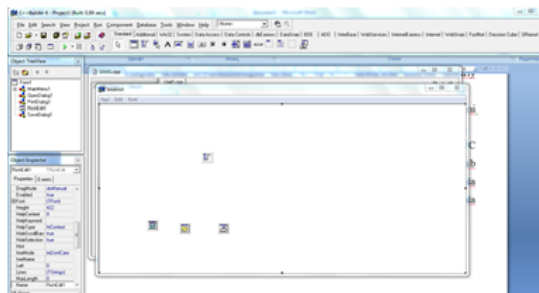Let's take a look at the notepad application in C++ Builder:

Figure 1. Notepad workspace in C++ Builder

To create a program, a String variable is declared after the form section.

```
#include <vcl.h>
#pragma hdrstop

#include "Unit1.h"
//-------------------------------------------------------------
#pragma package(smart_init)
#pragma resource "*.dfm"
TForm1 *Form1;
String fn;
```

Figure 2. Notepad form window in C++ Builder

The code to be included in the new section of the program is as follows: RichEdit1->Clear(); Clears the data written to the RichEdit component.

```
void __fastcall TForm1::yangi1Click(TObject *Sender)
{
    RichEdit1->Clear();
}
```

Figure 3. A new notepad window in C++ Builder

The code to be written to the new storage section of the program. We start the SaveDialog component and enter a condition.

```
//-------------------------------------------------------------
void __fastcall TForm1::Yangisaqlash1Click(TObject *Sender)
{
  if(SaveDialog1->Execute())
  {
    RichEdit1->Lines->SaveToFile(SaveDialog1->FileName);
    fn=SaveDialog1->FileName;
    Form1->Caption = fn;
  }
}
//-------------------------------------------------------------
```

Figure 4. Notepad is a new save window in C++ Builder

The code to be written in the opening section of the program is as follows: We call the and connect it to the Form. To run this component, we use the Execute() function.

```
void __fastcall TForm1::ochish1Click(TObject *Sender)
{
   OpenDialog1->Execute();
   RichEdit1->Lines->LoadFromFile(OpenDialog1->FileName);
   fn = OpenDialog1->FileName;
   Form1->Caption = fn;


}
//-------------------------------------------------------------------------
```

Figure 5. Notepad window in C++ Builder

The code to be written in the storage section of the program is as follows: if the RichEdit component is empty, accept the code in the new storage. Otherwise, send the information written in RichEdit to the SaveToFile function.

```
//-------------------------------------------------------------------------
void __fastcall TForm1::saqlash1Click(TObject *Sender)
{
    if(fn.IsEmpty())
    {
      Yangisaqlash1->Click();
    }
    else
    {
      RichEdit1->Lines->SaveToFile(fn);
    }
}
//-------------------------------------------------------------------------
```

Figure 6. Notepad Save Workspace in C++ Builder

Press F9 to open the compilation window of the program. To save the information written to the RichEdit component, a postcard window is opened from the file menu.
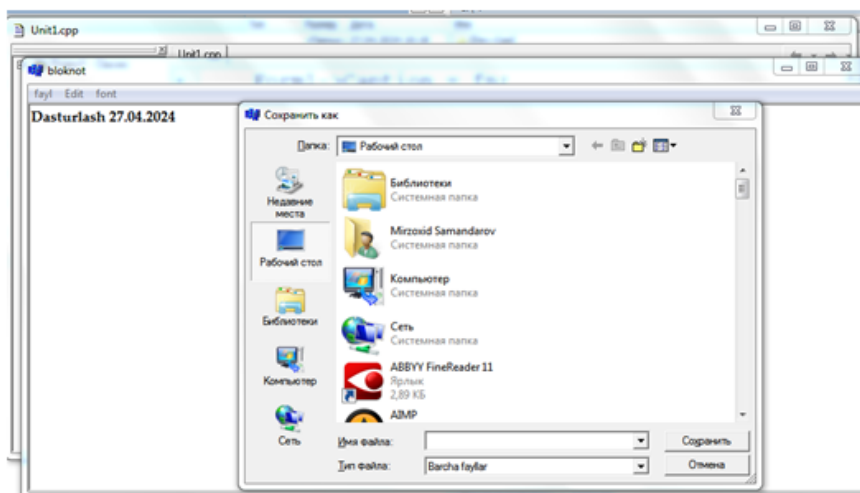

Figure 7. Notepad compilation window in C++ Builder

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