

## **APPENDIX 1. Terms**

**A central processing unit (CPU)** is the electronic circuitry within a computer that carries out the instructions of a computer program by performing the basic arithmetic, logical, control and input/output (I/O) operations specified by the instruction.

**COBOL (Common business-oriented language)** is a compiled English like computer programming language designed for business use. It is imperative, procedural and, since 2002, object-oriented.

**Assembler** helps to create object code by translating combinations of mnemonics and syntax for operations and addressing modes into their numerical equivalents.

**Data Definition Language (DDL)** is a vocabulary used to define data structures in SQL Server 2014. Use these statements to create, alter, or drop data structures in an instance of SQL Server.

**Data Manipulation Language (DML)** is a vocabulary used to retrieve and work with data in SQL Server 2014. Use these statements to add, modify, query, or remove data from a SQL Server database.

**Structured Query Language**, a special-purpose programming language designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS).

## APPENDIX 2. Abbreviations

<b>IBM</b>	The International Business Machines Corporation
<b>COBOL</b>	Common business-oriented language
<b>CPU</b>	A central processing unit
<b>DDL</b>	Data Definition Language
<b>DML</b>	Data Manipulation Language
<b>SQL</b>	Structured Query Language
<b>RDSMS</b>	Relational Data Stream Management System
<b>DBMS</b>	Relational Database Management System
<b>XAMP</b>	<b>X</b> means cross-platform <b>A</b> pache HTTP Server <b>M</b> ySQL <b>P</b> HP <b>P</b> erl
<b>DSN</b>	Data Source Name
<b>API</b>	Application Program Interface
<b>B2C</b>	Business to consumer
<b>B2B</b>	Business to Business
<b>GOOP</b>	Graphical Object Oriented Programming
<b>DFM</b>	Delphi form

### APPENDIX 3. Translation

***Text:***

... The state identification number (IDNO) – is unique numeric code assigned by registration authority to the entrepreneurs at the time of state registration, which serves to identify them in the information systems of the Republic of Moldova;

***Original Text:***

*... Număr de identificare de stat (IDNO) – cod numeric unic, atribuit de organul înregistrării de stat persoanelor juridice și întreprinzătorilor individuali la momentul înregistrării de stat, care servește pentru identificarea acestora în sistemele informaționale ale Republicii Moldova;*

**Source:**

Republic of Moldova. L E G E privind înregistrarea de stat a persoanelor juridice și a întreprinzătorilor individuali nr. 220-XVI din 19.10.2007: ÎNREGISTRAREA DE STAT A PERSOANELOR JURIDICE. In: 388. Republic of Moldova: Monitorul Oficial nr.184-187/711, 30.11.2007, Noțiunile principale, 2. Available at: <http://www.fisc.md/Legi.aspx?file=238>

## APPENDIX 4. Source code MySQL

```
-- phpMyAdmin SQL Dump
-- version 4.2.11
-- http://www.phpmyadmin.net
--
-- Host: 127.0.0.1
-- Generation Time: Mar 26, 2015 at 05:28 PM
-- Server version: 5.6.21
-- PHP Version: 5.6.3

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8 */;

--
-- Database: `invoice`
--
-----
--
-- Table structure for table `accounts`
--
CREATE TABLE IF NOT EXISTS `accounts` (
  `acc_id` varchar(15) NOT NULL,
  `p_d` varchar(250) NOT NULL COMMENT 'Position description '
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
--
-- Dumping data for table `accounts`
--
INSERT INTO `accounts` (`acc_id`, `p_d`) VALUES
('admin', 'admin'),
('staff', 'Permits to create, modify invoices, contracts and all information connected with invoice.');
```

```
-----
--
-- Table structure for table `apiuser`
--
CREATE TABLE IF NOT EXISTS `apiuser` (
  `id_user` int(11) NOT NULL,
  `nickname` varchar(50) NOT NULL,
  `passw` varchar(50) NOT NULL,
  `Id_staff` int(11) NOT NULL,
```

```

`acc_status` varchar(15) NOT NULL
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;
--
-- Dumping data for table `apiuser`
--
INSERT INTO `apiuser` (`id_user`, `nickname`, `passwd`, `Id_staff`, `acc_status`) VALUES
(1, 'Alexandru_Petras', '1234', 2, 'admin'),
(3, 'Doian_Moraru', '12369', 1, 'staff');

-----

--
-- Table structure for table `bank`
--

CREATE TABLE IF NOT EXISTS `bank` (
  `SWIF` varchar(15) NOT NULL,
  `name` varchar(50) NOT NULL,
  `Email` varchar(100) NOT NULL,
  `Phone` varchar(50) NOT NULL,
  `Fax` varchar(50) NOT NULL,
  `TeleFax` varchar(50) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `bank`
--

INSERT INTO `bank` (`SWIF`, `name`, `Email`, `Phone`, `Fax`, `TeleFax`) VALUES
('BSOC MD 2X', 'BANCA COMERCIALA „BANCA SOCIALA” S.A.', 'secretary@comertbank.md', '0 22
839839', '0 22 839840', '163145 TRADE MD'),
('CMTB MD 2X', 'Banca Comerciala „COMERTBANK” S.A.', 'office@socbank.md', '0 22 22-14-94, 0 22
22-14-81', '0 22 22-42-30', '163265 BANSO MD');

-----

--
-- Table structure for table `chart`
--

CREATE TABLE IF NOT EXISTS `chart` (
  `ID` int(11) NOT NULL,
  `ItemCode` int(11) NOT NULL,

```

```

`Amount` int(11) NOT NULL,
`Id_client` int(11) NOT NULL,
`date` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP,
`status` varchar(3) NOT NULL DEFAULT 'No'
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;

```

```

--
-- Dumping data for table `chart`
--

```

```

INSERT INTO `chart` (`ID`, `ItemCode`, `Amount`, `Id_client`, `date`, `status`) VALUES
(1, 40828820, 5, 1, '2015-03-17 10:57:32', 'No'),
(2, 40828820, 5, 1, '2015-03-17 10:57:38', 'No'),
(3, 2147483647, 1, 1, '2015-03-17 10:59:23', 'No');

```

```

-----
--
-- Table structure for table `client`
--

```

```

CREATE TABLE IF NOT EXISTS `client` (
  `name` varchar(150) NOT NULL,
  `idno` varchar(13) NOT NULL COMMENT 'Identification Number of an Organization',
  `id_bank` varchar(15) NOT NULL,
  `bank_acc` varchar(50) NOT NULL,
  `fax` varchar(100) NOT NULL,
  `email` varchar(100) NOT NULL,
  `phone` varchar(150) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

```

```

--
-- Dumping data for table `client`
--

```

```

INSERT INTO `client` (`name`, `idno`, `id_bank`, `bank_acc`, `fax`, `email`, `phone`) VALUES
('ASKA', '2001789456321', 'BSOC MD 2X', '16569774116KJ85', '', 'askaoffice@gmail.com',
'068998652'),
('COMPA SRL', 'CM1236548956', 'CMTB MD 2X', '1236594875465', '022-85-96-85',
'compa@mail.ru', '069551236\r\n079564852');

```

```

-----

```

```

--
-- Table structure for table `client_contract`
--

CREATE TABLE IF NOT EXISTS `client_contract` (
  `Id_contract` int(11) NOT NULL,
  `open_date` date NOT NULL,
  `end_date` date NOT NULL,
  `Status` int(11) NOT NULL DEFAULT '1',
  `id_client` varchar(150) NOT NULL,
  `Precondition` varchar(255) NOT NULL,
  `PostConditions` varchar(255) NOT NULL
) ENGINE=InnoDB AUTO_INCREMENT=3 DEFAULT CHARSET=latin1;

--
-- Dumping data for table `client_contract`
--

INSERT INTO `client_contract` (`Id_contract`, `open_date`, `end_date`, `Status`, `id_client`,
`Precondition`, `PostConditions`) VALUES
(1, '2014-12-18', '2016-03-23', 2, 'ASKA', 'Might have a Bank Account object and a deposit Money',
'All the products bought will be paid on the next day after delivery'),
(2, '2015-03-25', '2015-11-20', 2, 'COMPA SRL', 'Might have a Bank Account object and a deposit
Money', 'All the products bought will be paid on the end of the mouth ');

-----

--
-- Table structure for table `invoice`
--

CREATE TABLE IF NOT EXISTS `invoice` (
  `id_nr` int(10) unsigned NOT NULL,
  `series` varchar(3) NOT NULL DEFAULT 'MD',
  `id_client` int(11) NOT NULL,
  `date` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
  `id_staff` int(11) NOT NULL,
  `id_item` int(11) NOT NULL,
  `Total_amount` int(11) NOT NULL,
  `t_p_e_vat` float NOT NULL COMMENT 'Total price excluding VAT',
  `t_vat` float NOT NULL COMMENT 'Total VAT per Invoice',
  `t_p_vat` float NOT NULL COMMENT 'Total price per Invoice with VAT',

```

```

`DeliveryAddress` varchar(255) NOT NULL
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;

--
-- Dumping data for table `invoice`
--

INSERT INTO `invoice` (`id_nr`, `series`, `id_client`, `date`, `id_staff`, `id_item`, `Total_amount`,
`t_p_e_vat`, `t_vat`, `t_p_vat`, `DeliveryAddress`) VALUES
(2, 'MD', 1, '2015-03-26 08:55:27', 3, 2147483647, 56, 9660, 772.8, 10432.8, 's.Carabetovca, str.
Studentilor 7/1.'),
(3, 'MD', 2, '2015-03-26 09:07:06', 3, 40828820, 100, 1550, 124, 1674, 'COMPA SRL Bakery,
s.Sadaclia, str. M. Eminescu');

-----

--
-- Table structure for table `items`
--

CREATE TABLE IF NOT EXISTS `items` (
`item_code` int(11) NOT NULL,
`name` varchar(50) NOT NULL,
`id_pack` varchar(10) NOT NULL DEFAULT 'pieces' COMMENT 'Packaging type ',
`u_p` double NOT NULL,
`vat` int(11) NOT NULL,
`d_p` date NOT NULL COMMENT 'Produced at DD:MM:YYYY ',
`v_to` date NOT NULL COMMENT 'Valid to DD:MM:YYYY '
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `items`
--

INSERT INTO `items` (`item_code`, `name`, `id_pack`, `u_p`, `vat`, `d_p`, `v_to`) VALUES
(0, 'Ciocolate', 'PA', 89.7, 1, '2014-11-14', '2016-03-27'),
(40828820, 'Eggs', 'PA', 15.5, 1, '2015-03-06', '2015-06-06'),
(2147483647, 'Sugar', 'CR', 172.5, 2, '2015-03-06', '2020-04-06');

-----

--
-- Table structure for table `pack`

```



```

--

CREATE TABLE IF NOT EXISTS `pack` (
  `id_pack` varchar(10) NOT NULL,
  `name` varchar(30) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `pack`
--

INSERT INTO `pack` (`id_pack`, `name`) VALUES
('BA', 'barrel'),
('BO', 'Bottle'),
('CR', 'Crate'),
('NE', 'not packed'),
('PA', 'pack'),
('PL', 'Pallet');

-----

--
-- Table structure for table `staff`
--

CREATE TABLE IF NOT EXISTS `staff` (
  `id_staff` int(11) NOT NULL,
  `name` varchar(50) NOT NULL COMMENT 'Name and Surname',
  `email` varchar(50) NOT NULL,
  `address` varchar(250) NOT NULL,
  `birthday` date NOT NULL,
  `phone1` varchar(255) NOT NULL,
  `surname` varchar(50) NOT NULL
) ENGINE=InnoDB AUTO_INCREMENT=6 DEFAULT CHARSET=latin1;

--
-- Dumping data for table `staff`
--

INSERT INTO `staff` (`id_staff`, `name`, `email`, `address`, `birthday`, `phone1`, `surname`) VALUES
(1, 'Doina', 'doinamorarucib0610@gmail.com', 'r. Basarabeasca, s. Sadaclia, str. Frunze 148', '1989-10-18', '06803560', 'Moraru'),
(2, 'Alexandru', 'sk@gmail.com', '', '1991-09-25', '', 'Petras'),

```

```
(3, 'Sofia', 'ms@yahoo.ru', 'Studentilor 7/1, Chisinau', '1986-03-28', '022478654', 'Marinos'),
(4, 'Ann', 'va@mail.ru', '', '1990-03-24', '420778965243', 'Voikovici'),
(5, 'Mihail', 'pam@gmail.com', '', '1987-03-13', '', 'Petrache');
```

```
-----
```

```
--
-- Table structure for table `status`
--
```

```
CREATE TABLE IF NOT EXISTS `status` (
  `id` int(11) NOT NULL,
  `status` varchar(20) NOT NULL,
  `description` varchar(255) NOT NULL
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;
```

```
--
-- Dumping data for table `status`
--
```

```
INSERT INTO `status` (`id`, `status`, `description`) VALUES
```

```
(1, 'Pending', 'Default processing status when you create a new contract. This status indicates that the contract was created and that some data was entered. '),
(2, 'Active', 'All contract data is entered into the system and has passed system data validation. A contract must be in a status of Active for any contract element to be available for application engine processing. '),
(3, 'Closed', 'The contract was terminated or the contract was completed, all contractual obligations were fulfilled and all entitlements were received. ');
```

```
-----
```

```
--
-- Table structure for table `vat`
--
```

```
CREATE TABLE IF NOT EXISTS `vat` (
  `id` int(11) NOT NULL,
  `Description` char(255) NOT NULL,
  `Persentage` double NOT NULL
) ENGINE=InnoDB AUTO_INCREMENT=3 DEFAULT CHARSET=latin1;
```

```
--
-- Dumping data for table `vat`
```

```

--

INSERT INTO `vat` (`id`, `Description`, `Percentage`) VALUES
(1, 'For normal goods', 20),
(2, 'milk, butter, bred, medicines', 8);

--
-- Indexes for dumped tables
--

--
-- Indexes for table `accounts`
--
ALTER TABLE `accounts`
ADD PRIMARY KEY (`acc_id`);

--
-- Indexes for table `apiuser`
--
ALTER TABLE `apiuser`
ADD PRIMARY KEY (`id_user`), ADD KEY `Id_staff` (`Id_staff`), ADD KEY `acc_status` (`acc_status`);

--
-- Indexes for table `bank`
--
ALTER TABLE `bank`
ADD PRIMARY KEY (`SWIF`);

--
-- Indexes for table `chart`
--
ALTER TABLE `chart`
ADD PRIMARY KEY (`ID`), ADD KEY `ItemCode` (`ItemCode`,`Id_client`), ADD KEY `Id_client`
(`Id_client`);

--
-- Indexes for table `client`
--
ALTER TABLE `client`
ADD PRIMARY KEY (`name`), ADD KEY `id_bank` (`id_bank`);

--
-- Indexes for table `client_contract`

```

```

--
ALTER TABLE `client_contract`
ADD PRIMARY KEY (`Id_contract`), ADD KEY `id_client` (`id_client`), ADD KEY `Status` (`Status`);

--
-- Indexes for table `invoice`
--
ALTER TABLE `invoice`
ADD PRIMARY KEY (`id_nr`), ADD KEY `id_client` (`id_client`,`id_staff`), ADD KEY `id_client_2`
(`id_client`), ADD KEY `id_client_3` (`id_client`), ADD KEY `id_staff` (`id_staff`), ADD KEY `id_item`
(`id_item`);

--
-- Indexes for table `items`
--
ALTER TABLE `items`
ADD PRIMARY KEY (`item_code`), ADD KEY `id_pack` (`id_pack`), ADD KEY `vat` (`vat`);

--
-- Indexes for table `pack`
--
ALTER TABLE `pack`
ADD PRIMARY KEY (`id_pack`);

--
-- Indexes for table `staff`
--
ALTER TABLE `staff`
ADD PRIMARY KEY (`id_staff`);

--
-- Indexes for table `status`
--
ALTER TABLE `status`
ADD PRIMARY KEY (`id`);

--
-- Indexes for table `vat`
--
ALTER TABLE `vat`
ADD PRIMARY KEY (`id`);

--

```

```

-- AUTO_INCREMENT for dumped tables
--
--
-- AUTO_INCREMENT for table `apiuser`
--
ALTER TABLE `apiuser`
MODIFY `id_user` int(11) NOT NULL AUTO_INCREMENT,AUTO_INCREMENT=4;
--
-- AUTO_INCREMENT for table `chart`
--
ALTER TABLE `chart`
MODIFY `ID` int(11) NOT NULL AUTO_INCREMENT,AUTO_INCREMENT=4;
--
-- AUTO_INCREMENT for table `client_contract`
--
ALTER TABLE `client_contract`
MODIFY `Id_contract` int(11) NOT NULL AUTO_INCREMENT,AUTO_INCREMENT=3;
--
-- AUTO_INCREMENT for table `invoice`
--
ALTER TABLE `invoice`
MODIFY `id_nr` int(10) unsigned NOT NULL AUTO_INCREMENT,AUTO_INCREMENT=4;
--
-- AUTO_INCREMENT for table `staff`
--
ALTER TABLE `staff`
MODIFY `id_staff` int(11) NOT NULL AUTO_INCREMENT,AUTO_INCREMENT=6;
--
-- AUTO_INCREMENT for table `status`
--
ALTER TABLE `status`
MODIFY `id` int(11) NOT NULL AUTO_INCREMENT,AUTO_INCREMENT=4;
--
-- AUTO_INCREMENT for table `vat`
--
ALTER TABLE `vat`
MODIFY `id` int(11) NOT NULL AUTO_INCREMENT,AUTO_INCREMENT=3;
--
-- Constraints for dumped tables
--
--

```

```

-- Constraints for table `apiuser`
--
ALTER TABLE `apiuser`
ADD CONSTRAINT `apiuser_ibfk_1` FOREIGN KEY (`acc_status`) REFERENCES `accounts` (`acc_id`)
ON DELETE CASCADE ON UPDATE CASCADE,
ADD CONSTRAINT `apiuser_ibfk_2` FOREIGN KEY (`id_staff`) REFERENCES `staff` (`id_staff`) ON
DELETE CASCADE ON UPDATE CASCADE;

--
-- Constraints for table `client`
--
ALTER TABLE `client`
ADD CONSTRAINT `client_ibfk_1` FOREIGN KEY (`id_bank`) REFERENCES `bank` (`SWIF`) ON
DELETE CASCADE ON UPDATE CASCADE;

--
-- Constraints for table `client_contract`
--
ALTER TABLE `client_contract`
ADD CONSTRAINT `client_contract_ibfk_2` FOREIGN KEY (`Status`) REFERENCES `status` (`id`) ON
DELETE CASCADE ON UPDATE CASCADE,
ADD CONSTRAINT `client_contract_ibfk_3` FOREIGN KEY (`id_client`) REFERENCES `client`
(`name`) ON DELETE CASCADE ON UPDATE CASCADE;

--
-- Constraints for table `invoice`
--
ALTER TABLE `invoice`
ADD CONSTRAINT `invoice_ibfk_7` FOREIGN KEY (`id_staff`) REFERENCES `apiuser` (`id_user`) ON
DELETE CASCADE ON UPDATE CASCADE,
ADD CONSTRAINT `invoice_ibfk_8` FOREIGN KEY (`id_item`) REFERENCES `items` (`item_code`)
ON DELETE CASCADE ON UPDATE CASCADE,
ADD CONSTRAINT `invoice_ibfk_9` FOREIGN KEY (`id_client`) REFERENCES `client_contract`
(`Id_contract`) ON DELETE CASCADE ON UPDATE CASCADE;

--
-- Constraints for table `items`
--
ALTER TABLE `items`
ADD CONSTRAINT `items_ibfk_1` FOREIGN KEY (`id_pack`) REFERENCES `pack` (`id_pack`) ON
DELETE CASCADE ON UPDATE CASCADE,
ADD CONSTRAINT `items_ibfk_2` FOREIGN KEY (`vat`) REFERENCES `vat` (`id`) ON DELETE
CASCADE ON UPDATE CASCADE;

```

```
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;  
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;  
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

## APPENDIX 5. Source code Builder C++ Application

### Project1.cpp

```
//-----  
#include <vcl.h>  
#pragma hdrstop  
//-----  
USEFORM("Unit1.cpp", Form1);  
USEFORM("Unit2.cpp", Form2);  
USEFORM("Unit3.cpp", Form3);  
USEFORM("Unit4.cpp", Form4);  
USEFORM("Unit5.cpp", Form5);  
USEFORM("Unit6.cpp", Form6);  
USEFORM("Unit7.cpp", Form7);  
USEFORM("Unit8.cpp", Form8);  
USEFORM("Unit9.cpp", Form9);  
USEFORM("Unit10.cpp", Form10);  
USEFORM("Unit11.cpp", Form11);  
//-----  
WINAPI WinMain(HINSTANCE, HINSTANCE, LPSTR, int)  
{  
    try  
    {  
        Application->Initialize();  
        Application->CreateForm(__classid(TForm1), &Form1);  
        Application->CreateForm(__classid(TForm2), &Form2);  
        Application->CreateForm(__classid(TForm3), &Form3);  
        Application->CreateForm(__classid(TForm4), &Form4);  
        Application->CreateForm(__classid(TForm5), &Form5);  
        Application->CreateForm(__classid(TForm6), &Form6);  
        Application->CreateForm(__classid(TForm7), &Form7);  
        Application->CreateForm(__classid(TForm8), &Form8);  
        Application->CreateForm(__classid(TForm9), &Form9);  
        Application->CreateForm(__classid(TForm10), &Form10);  
        Application->CreateForm(__classid(TForm11), &Form11);  
        Application->Run();  
    }  
    catch (Exception &exception)  
    {  
        Application->ShowException(&exception);  
    }  
    catch (...)  
    {  
        try  
        {  
            throw Exception("");  
        }  
        catch (Exception &exception)  
        {  
            Application->ShowException(&exception);  
        }  
    }  
    return 0;  
}
```



//-----

## UNIT 1.h File header.

//-----

```
#ifndef Unit1H
#define Unit1H
//-----
#include <Classes.hpp>
#include <Controls.hpp>
#include <StdCtrls.hpp>
#include <Forms.hpp>
#include <ADODB.hpp>
#include <DB.hpp>
#include <DBGrids.hpp>
#include <Grids.hpp>
#include <ComCtrls.hpp>
#include <Menus.hpp>
#include <DBCtrls.hpp>
#include <Mask.hpp>
#include "DBSecur.hpp"
#include "RXDBCtrl.hpp"
#include "RxLogin.hpp"
#include "ToolEdit.hpp"
#include <Buttons.hpp>
#include <ExtCtrls.hpp>
//-----
class TForm1 : public TForm
{
__published:      // IDE-managed Components
    TADOConnection *ADOConnection1;
    TADOTable *ADOTable1;
    TDataSource *DataSource1;
    TPageControl *PageControl1;
    TTabSheet *TabSheet1;
    TTabSheet *TabSheet2;
    TLabel *Label1;
    TLabel *Label2;
    TLabel *Label10;
    TDBGrid *DBGrid1;
    TMainMenu *MainMenu1;
    TMenuItem *File1;
    TMenuItem *Exit1;
    TMenuItem *Edit1;
    TMenuItem *ManageItemDetails1;
    TMenuItem *M1;
    TMenuItem *Help1;
    TLabel *Label11;
    TLabel *Label12;
    TLabel *Label14;
    TDBDateEdit *DBDateEdit1;
    TDBDateEdit *DBDateEdit2;
```

```

TADOTable *ADOTable2;
TDataSource *DataSource2;
TLabel *Label13;
TDBGrid *DBGrid2;
TDBLookupComboBox *DBLookupComboBox2;
TADOTable *ADOTable3;
TDataSource *DataSource3;
TADOQuery *ADOQuery1;
TDataSource *DataSource4;
TLabel *Label15;
TLabel *Label16;
TDBMemo *DBMemo1;
TDBMemo *DBMemo2;
TDBLookupComboBox *DBLookupComboBox1;
TButton *Button1;
TBitBtn *BitBtn1;
TRadioGroup *RadioGroup1;
TBitBtn *BitBtn2;
TDBNavigator *DBNavigator1;
TDBText *DBText1;
TMenuItem *Managenewclient1;
TDBText *DBText2;
TDataSource *DataSource5;
TADOTable *ADOTable4;
TDBText *DBText3;
TDBLookupComboBox *DBLookupComboBox3;
TLabel *Label3;
TDBLookupComboBox *DBLookupComboBox4;
TADOTable *ADOTable5;
TDataSource *DataSource6;
TLabel *Label4;
TDBEdit *DBEdit1;
TDBEdit *DBEdit2;
TDBEdit *DBEdit3;
TLabel *Label5;
TLabel *Label6;
TLabel *Label8;
TDBEdit *DBEdit4;
TGroupBox *GroupBox1;
TDBMemo *DBMemo3;
TBitBtn *BitBtn3;
TBitBtn *BitBtn4;
TDBNavigator *DBNavigator2;
void __fastcall ManageClientDetails1Click(TObject *Sender);
void __fastcall M1Click(TObject *Sender);
void __fastcall Exit1Click(TObject *Sender);
void __fastcall ManageItemDetails1Click(TObject *Sender);
void __fastcall Help1Click(TObject *Sender);
void __fastcall DBLookupComboBox2Click(TObject *Sender);
void __fastcall TabSheet2MouseMove(TObject *Sender,
    TShiftState Shift, int X, int Y);
void __fastcall BitBtn2Click(TObject *Sender);
void __fastcall BitBtn1Click(TObject *Sender);
void __fastcall Button1Click(TObject *Sender);
private:    // User declarations
public:    // User declarations
__fastcall TForm1(TComponent* Owner);

```

```

};
//-----
extern PACKAGE TForm1 *Form1;
//-----
#endif

UNIT 1.CPP

//-----

#include <vcl.h>
#pragma hdrstop

#include "Unit1.h"
#include "Unit2.h"
#include "Unit3.h"
#include "Unit4.h"
#include "Unit5.h"
#include "Unit6.h"
#include "Unit7.h"
#include "Unit8.h"
#include "Unit9.h"
#include "Unit10.h"
#include "Unit11.h"

//-----
#pragma package(smart_init)
#pragma link "DBSecur"
#pragma link "RXDBCtrl"
#pragma link "RxLogin"
#pragma link "ToolEdit"
#pragma resource "*.dfm"
TForm1 *Form1;
//-----
__fastcall TForm1::TForm1(TComponent* Owner)
    : TForm(Owner)
{
}
//-----

void __fastcall TForm1::ManageClientDetails1Click(TObject *Sender)
{
Form2->Show();
}
//-----

void __fastcall TForm1::M1Click(TObject *Sender)
{
Form2->Show();
}
//-----

void __fastcall TForm1::Exit1Click(TObject *Sender)
{
Application->Terminate();
}

```

```

}
//-----

void __fastcall TForm1::ManageItemDetails1Click(TObject *Sender)
{
Form3->Show();
}
//-----

void __fastcall TForm1::Help1Click(TObject *Sender)
{
Form6->Show();
}
//-----

void __fastcall TForm1::DBLookupComboBox2Click(TObject *Sender)
{
AnsiString s,n;
n=DBLookupComboBox2->Text;
n="select client_contract.id_client from client_contract";
s="select idno,bank.name,bank_acc,client.fax,email,phone from client,bank
where client.id_bank=bank.swif";
ADOQuery1->Active=false;
ADOQuery1->SQL->Text=s;
ADOQuery1->Open();
}
//-----

void __fastcall TForm1::TabSheet2MouseMove(TObject *Sender,
TShiftState Shift, int X, int Y)
{
AnsiString s,n;
n="select client_contract.id_client from client_contract";
s="select item_code as Code, items.name as Name, pack.name as Package, u_p as
Unit_Price, vat.persentage as 'VAT(%)', d_p as Production_Date, v_to as
Best_before from items, pack, vat where items.id_pack=pack.id_pack and
items.vat=vat.id";
ADOQuery1->Active=false;
ADOQuery1->SQL->Text=s;
ADOQuery1->Open();
}
//-----

void __fastcall TForm1::BitBtn2Click(TObject *Sender)
{
if (RadioGroup1->ItemIndex==0) Form9->Show();
else if (RadioGroup1->ItemIndex==1) Form10->Show();
else if (RadioGroup1->ItemIndex==2) Form11->Show();
}
//-----

```

```

void __fastcall TForm1::BitBtn1Click(TObject *Sender)
{
Application->Terminate();
}
//-----

```

```

void __fastcall TForm1::Button1Click(TObject *Sender)
{
Form7->Show();
}
//-----

```

#### UNIT 1.DFM

```

//-----
object Form1: TForm1
Left = 433
Top = 44
Width = 692
Height = 639
Caption = 'Invoice'
Color = clBtnFace
Font.Charset = DEFAULT_CHARSET
Font.Color = clWindowText
Font.Height = -11
Font.Name = 'MS Sans Serif'
Font.Style = []
Menu = MainMenu1
OldCreateOrder = False
PixelsPerInch = 96
TextHeight = 13
object PageControl1: TPageControl
Left = 0
Top = 4
Width = 665
Height = 577
ActivePage = TabSheet1
Font.Charset = ANSI_CHARSET
Font.Color = clWindowText
Font.Height = -16
Font.Name = 'Cambria'
Font.Style = []
ParentFont = False
TabIndex = 0
TabOrder = 0
object TabSheet1: TTabSheet
Caption = 'Invoice'
object Label1: TLabel
Left = 92
Top = 4
Width = 100
Height = 19
Caption = 'Serial Number'
Font.Charset = ANSI_CHARSET
Font.Color = clWindowText
Font.Height = -16
Font.Name = 'Cambria'

```

```

    Font.Style = []
    ParentFont = False
end
object Label2: TLabel
    Left = 376
    Top = 8
    Width = 32
    Height = 19
    Caption = 'Date'
    Font.Charset = ANSI_CHARSET
    Font.Color = clWindowText
    Font.Height = -16
    Font.Name = 'Cambria'
    Font.Style = []
    ParentFont = False
end
object Label10: TLabel
    Left = 41
    Top = 238
    Width = 138
    Height = 19
    Caption = 'Total Price with VAT'
    Font.Charset = ANSI_CHARSET
    Font.Color = clWindowText
    Font.Height = -16
    Font.Name = 'Cambria'
    Font.Style = []
    ParentFont = False
end

object DBLookupComboBox3: TDBLookupComboBox
    Left = 204
    Top = 36
    Width = 145
    Height = 27
    DataField = 'id_client'
    DataSource = DataSource5
    KeyField = 'Id_contract'
    ListField = 'id_client'
    ListSource = DataSource1
    TabOrder = 1
end
object DBLookupComboBox4: TDBLookupComboBox
    Left = 204
    Top = 72
    Width = 145
    Height = 27
    DataField = 'id_item'
    DataSource = DataSource5
    KeyField = 'item_code'
    ListField = 'name'
    ListSource = DataSource6
    TabOrder = 2
end

object DBDateEdit2: TDBDateEdit
    Left = 432

```

```

    Top = 248
    Width = 184
    Height = 29
    DataField = 'end_date'
    DataSource = DataSource1
    NumGlyphs = 2
    TabOrder = 1
end
object DBGrid2: TDBGrid
    Left = 4
    Top = 312
    Width = 633
    Height = 104
    DataSource = DataSource4
    TabOrder = 2
    TitleFont.Charset = ANSI_CHARSET
    TitleFont.Color = clWindowText
    TitleFont.Height = -16
    TitleFont.Name = 'Cambria'
    TitleFont.Style = []
end
object DBLookupComboBox2: TDBLookupComboBox
    Left = 96
    Top = 16
    Width = 181
    Height = 27
    DataField = 'id_client'
    DataSource = DataSource1
    KeyField = 'name'
    ListField = 'name'
    ListSource = DataSource3
    TabOrder = 3
    OnClick = DBLookupComboBox2Click
end
object DBMemo1: TDBMemo
    Left = 12
    Top = 76
    Width = 293
    Height = 165
    DataField = 'Precondition'
    DataSource = DataSource1
    TabOrder = 4
end
object DBMemo2: TDBMemo
    Left = 320
    Top = 76
    Width = 297
    Height = 165
    DataField = 'PostConditions'
    DataSource = DataSource1
    TabOrder = 5
end
object DBLookupComboBox1: TDBLookupComboBox
    Left = 448
    Top = 20
    Width = 169
    Height = 27

```

```

    DataField = 'Status'
    DataSource = DataSource1
    KeyField = 'id'
    ListField = 'status'
    ListSource = DataSource2
    TabOrder = 6
end
object Button1: TButton
    Left = 284
    Top = 16
    Width = 25
    Height = 25
    Caption = '+'
    Font.Charset = DEFAULT_CHARSET
    Font.Color = clWindowText
    Font.Height = -11
    Font.Name = 'MS Sans Serif'
    Font.Style = [fsBold]
    ParentFont = False
    TabOrder = 7
    OnClick = Button1Click
end
object BitBtn1: TBitBtn
    Left = 572
    Top = 516
    Width = 75
    Height = 25
    Caption = 'Close'
    TabOrder = 8
    OnClick = BitBtn1Click
    Kind = bkCancel
end
object RadioGroup1: TRadioGroup
    Left = 4
    Top = 420
    Width = 393
    Height = 97
    Caption = 'Print Options'
    Items.Strings = (
        'Contracts with Pending Status'
        'Contracts with Active Status'
        'Contracts with Closed Status')
    TabOrder = 9
end
object BitBtn2: TBitBtn
    Left = 8
    Top = 520
    Width = 75
    Height = 25
    Caption = '&Print'
    TabOrder = 10
    OnClick = BitBtn2Click
    Kind = bkYes
end
object DBNavigator1: TDBNavigator
    Left = 4
    Top = 284

```



```

        Width = 320
        Height = 25
        DataSource = DataSource1
        TabOrder = 11
    end
end
end
object ADOConnection1: TADOConnection
    Connected = True
    ConnectionString =
        'Provider=MSDASQL.1;Persist Security Info=True;User ID=root;Exten' +
        'ded Properties="Driver=MySQL ODBC 5.3 ANSI Driver;SERVER=127.0.0' +
        '.1;UID=root;DATABASE=invoice;PORT=3306;COLUMN_SIZE_S32=1";Initia' +
        'l Catalog=invoice'
    Left = 632
    Top = 32
End.

object ADOTable1: TADOTable
    Active = True
    Connection = ADOConnection1
    CursorType = ctStatic
    TableName = 'client_contract'
    Left = 632
    Top = 60
end
object DataSource1: TDataSource
    DataSet = ADOTable1
    Left = 632
    Top = 88
end
object MainMenu1: TMainMenu
    Left = 632
    object File1: TMenuItem
        Caption = 'File'
        object Exit1: TMenuItem
            Caption = 'Exit'
            OnClick = Exit1Click
        end
    end
end
object Edit1: TMenuItem
    Caption = 'Edit'
    object ManageItemDetails1: TMenuItem
        Caption = 'Manage Item Details'
        OnClick = ManageItemDetails1Click
    end
    object M1: TMenuItem
        Caption = 'Manage employee details'
        OnClick = M1Click
    end
end
object Managenewclient1: TMenuItem
    Caption = 'Manage new client'
end
end
object Help1: TMenuItem
    Caption = 'Help'
    OnClick = Help1Click

```

```

end
object ADOTable3: TADOTable
Active = True
Connection = ADOConnection1
CursorType = ctStatic
TableName = 'client'
Left = 632
Top = 180
end
object DataSource3: TDataSource
DataSet = ADOTable3
Left = 632
Top = 212
end
object ADOQuery1: TADOQuery
Connection = ADOConnection1
CursorType = ctStatic
Parameters = <>
SQL.Strings = (
    'select id_contract as Nr, open_date as Open_date, end_date as En' +
    'd_Date, Status.status as Status, client.name as Company, client.' +
    'idno as IDNO from client_contract, client, status where client_' +
    'contract.id_client=client.id and client_contract.Status=status.i' +
    'd')
Left = 632
Top = 244
end
object DataSource4: TDataSource
DataSet = ADOQuery1
Left = 632
Top = 276
end
object DataSource5: TDataSource
DataSet = ADOTable4
Top = 320
end
object ADOTable4: TADOTable
Active = True
Connection = ADOConnection1
CursorType = ctStatic
TableName = 'invoice'

```