

# **Report about the interface**

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## **1、Environment**

In this project I use MFC to complete the interface design work. At a certain level, the MFC generation program is small and the execution code is efficient. Just because it is easy to get started, so I choose this for my work,

## **2、Achievement**

### **● Combo Box**

In MFC, the Combo Box control is convenient and saves space. From the user's perspective, this control consists of a text input control and a drop-down menu. The user can select an option from a pre-defined list and also enter text directly into the text box.

For adding an Item to a combo box, I used the function `AddString()` to add Items to the Combo Box control. After the initialization, I select one in the Combo Box drop-down list, then click on the Button, a box pops up, telling us which one was selected and adding the processing code.

### **● Modal dialog**

The modal dialog box is such a dialog box. When it pops up, other windows of the application will no longer accept user input. Only the dialog box responds to the user input, and after the corresponding operation is exited, other windows can continue to work with the user. Interaction.

The general method of creation is as follows: create a new dialog template, modify its ID to `IDD_TIP_DIALOG`, Caption to "prompt", then add a static text box (static text) on the dialog template, and finally adjust the control of each control The size of the location and dialog. Right click on the dialog template and select "Add Class...", pop up the dialog box for adding

classes, set "Class name", and modify the function body of OnBnClickedAddButton().

- **Modeless dialog**

The modeless dialog box is, after it pops up, other windows of the program can still respond to user input. Non-modal dialogs are generally used to display prompts and so on. In fact, there is no difference between the modal dialog and the non-modal dialog in creating the dialog resource and generating the dialog class, so the previously created IDD\_TIP\_DIALOG dialog resource and the CTipDlg class do not need to be modified. What needs to be modified is the creation and display of the dialog class instance, which is the dialog display code added in the body of the CAdditionDlg::OnBnClickedAddButton() function.

- **Network**

Sockets are the cornerstone of communication and are the basic operating unit for network communications that support the TCP/IP protocol. It is an abstract representation of endpoints in the process of network communication. It contains five kinds of information necessary for network communication: the protocol used for connection, the IP address of the local host, the protocol port of the local process, the IP address of the remote host, and the protocol of the remote process. port. When the application layer communicates data through the transport layer, TCP encounters the problem of providing concurrent services for multiple application processes at the same time. Multiple TCP connections or multiple application processes may need to transfer data over the same TCP protocol port. To distinguish between different application processes and connections, many computer operating systems provide a socket interface for applications to interact with the TCP/IP protocol. The application layer can communicate with the transport layer through the Socket interface to distinguish communication from different application

processes or network connections, and implement concurrent services for data transmission.

The client `void CADlg::OnButton1() { CSocket jin; jin.Create(); jin.Connect("127.0.0.1",6666); }` The `jin.Accept()` of the server is blocked; and the client `jin.Connect("125.74.66.77",6666);` wake up the server.

If communicating on your own computer, ip must be native: `inet_addr("x.x.x.x");` or: set the circuit of the cost machine 127.0.0.1

If you need to use your own TCP/IP programming on different wireless networks, then you need to bind your port number to the IP number assigned to your router, so other users can pass this port number and The IP address is communicating with you.

### **3、 Conclusion**

In this project, we have learned a lot of things, such as web server, sql database application, interface knowledge, etc. Although our project does not meet the teacher's cooperation requirements, the mfc-based interface is not very beautiful, but unilaterally completed. A small chat room, but we can feel the joy of teamwork and the passion of thinking. Thank you for giving us such a good opportunity.