

Tutorial Material

Communication between Objects

How to pass a message from one object to another object?

- The sender set a message.
- The coordinator get the message by calling the sender' s getMessage() function.
- The coordinator passes the message to the receiver by calling the setMessage() function of the receiver.
- The receiver processes the message.

The Sender

```
class Sender {  
    string message;  
public:  
    void setMessage();  
    string getMessage() {return message;}  
};
```

```
void Sender::setMessage() {  
    string ss;  
    cout << "Sender says:";  
    getline(cin, ss);  
    message = ss;  
}
```

The Receiver

```
class Receiver {  
    string message;  
public:  
    void receiveMessage(string ss)  
        {message = ss;}  
    void printMessage()  
        {cout << "You said: " << message <<  
endl;}  
};
```

The coordinator

```
class Coordinator {  
    Sender sender;  
    Receiver receiver;  
public:  
    void run();  
};  
  
void Coordinator::run() {  
    sender.setMessage();  
    receiver.receiveMessage(sender.getMessage());  
    receiver.printMessage();  
}
```

Application

```
#include<iostream>
#include<string>
using namespace std;
```

```
#include"sender.h"
#include"receiver.h"
#include"coordinator.h"
```

```
int main() {
    Coordinator c;
    c.run();
    return 0;
}
```