7-13 | IM 系统的核心 handler 模块测试

测试核心类:

```
Java
package imclient;
import io.netty.bootstrap.Bootstrap;
import io.netty.channel.Channel;
import io.netty.channel.ChannelFuture;
import io.netty.channel.ChannelInitializer;
import io.netty.channel.EventLoopGroup;
import io.netty.channel.nio.NioEventLoopGroup;
import io.netty.channel.socket.SocketChannel;
import io.netty.channel.socket.nio.NioSocketChannel;
import org.qiyu.live.im.core.server.common.ImMsg;
import org.qiyu.live.im.core.server.common.ImMsgDecoder;
import org.qiyu.live.im.core.server.common.ImMsgEncoder;
import org.qiyu.live.im.interfaces.ImMsgCodeEnum;
/**
 * @Author idea
 * @Date: Created in 11:20 2023/7/1
 * @Description
public class ImClientApplication {
    private void startConnection(String address, int port) throws
InterruptedException {
        EventLoopGroup clientGroup = new NioEventLoopGroup();
        Bootstrap bootstrap = new Bootstrap();
        bootstrap.group(clientGroup);
        bootstrap.channel(NioSocketChannel.class);
        bootstrap.handler(new ChannelInitializer<SocketChannel>()
{
            @Override
            protected void initChannel(SocketChannel ch) throws
```

```
Exception {
                System.out.println("初始化连接建立");
                ch.pipeline().addLast(new ImMsgDecoder());
                ch.pipeline().addLast(new ImMsgEncoder());
                ch.pipeline().addLast(new ClientHandler());
            }
        });
        ChannelFuture channelFuture = bootstrap.connect(address,
port).sync();
        Channel channel = channelFuture.channel();
        for (int i = 0; i < 100; i++) {
channel.writeAndFlush(ImMsg.build(ImMsgCodeEnum.IM_LOGIN_MSG.getCo
de(), "login"));
channel.writeAndFlush(ImMsg.build(ImMsgCodeEnum.IM_LOGOUT_MSG.getC
ode(), "logout"));
channel.writeAndFlush(ImMsg.build(ImMsgCodeEnum.IM_BIZ_MSG.getCode
(), "biz"));
channel.writeAndFlush(ImMsg.build(ImMsgCodeEnum.IM_HEARTBEAT_MSG.g
etCode(), "heart"));
            Thread.sleep(3000);
        }
    }
    public static void main(String[] args) throws
InterruptedException {
        ImClientApplication client = new ImClientApplication();
        client.startConnection("localhost", 9090);
    }
}
```

相关 handler:

```
java
package imclient;

import io.netty.channel.ChannelHandlerContext;
import io.netty.channel.ChannelInboundHandlerAdapter;
import org.qiyu.live.im.core.server.common.ImMsg;
```

```
/**

* @Author idea

* @Date: Created in 22:15 2023/7/8

* @Description

*/
public class ClientHandler extends ChannelInboundHandlerAdapter {

    @Override
    public void channelRead(ChannelHandlerContext ctx, Object msg)
throws Exception {
        ImMsg imMsg = (ImMsg) msg;
        System.out.println("【服务端响应数据】result is " + imMsg);
    }
}
```