**V1**

service Shopping{

    rpc CreateUser (CreateUserRequest) returns (CreateUserResponse);

    //ADMIN

    rpc AddProduct(AddProductRequest) returns(ConfirmationReply);

    rpc UpdateProduct(UpdateProductRequest) returns(ConfirmationReply);

    rpc RemoveProduct(RemoveProductRequest) returns(UpdatedListReply);

    rpc ListOrders(ListOrdersRequest) returns(OrderListReply);

    //CUSTOMER

    rpc SearchProduct (SearchProductRequest) returns (ProductListReply);

    rpc AvailableProducts (AvailableProductRequest) returns (AllProductsReply);

    rpc AddToCart (CartItemRequest) returns (ConfirmationReply);

    rpc PlaceOrder (PlaceOrderRequest) returns (OrderConfirmationReply);

}

//USER

message CreateUserRequest {

    string user\_Id = 1;

    string user\_name = 2;

    string user\_role = 3;

}

message CreateUserResponse{

    string message = 1;

}

//ADMIN

message AddProductRequest{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

    int32 product\_quantity = 4;

    string status = 5;

}

message ConfirmationReply{

    string message = 1;

}

message UpdateProductRequest{

    string product\_id = 1;

    string product\_name = 2;

    int32 new\_quantity = 3;

    double product\_price = 4;

    string status = 5;

}

message RemoveProductRequest{

    string product\_id = 1;

    string product\_name = 2;

}

message UpdatedListReply{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

}

message ListOrdersRequest{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

}

message OrderListReply{

    string product\_id = 1;

    string product\_name = 2;

    string product\_price = 3;

}

//CUSTOMER

message SearchProductRequest{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

}

message ProductListReply{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

}

message AvailableProductRequest{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

}

message AllProductsReply{

    repeated Product products = 1;

}

message CartItemRequest{

    string product\_id = 1;

    int32 quantity = 2;

}

message PlaceOrderRequest{

    string order\_id = 1;

}

message OrderConfirmationReply{

    string order\_id = 1;

    double product\_price = 2;

    string order\_name = 3;

}