**V4**  
  
syntax = "proto3";

package shopping;

message Empty {

    string message =1;

}

service Admin{

    rpc AddAdmin (AddAdminRequest) returns (AddAdminResponse);

    rpc AuthenticateUser (AuthenticateAdminRequest) returns (AuthenticateAdminResponse);

    rpc AddProduct (AddProductRequest) returns (ProductIdResponse);

    rpc UpdateProduct (UpdateProductRequest) returns (Empty);

    rpc RemoveProduct (RemoveProductRequest) returns (UpdatedListResponse);

}

message AddAdminRequest {

    string user\_id = 1;

    string user\_name = 2;

    string password = 3;

    string role = 4;

}

message AddAdminResponse {

    string user\_id = 1;

    string role = 4;

}

message AuthenticateAdminRequest{

    string user\_name = 1;

    string password = 2;

}

message AuthenticateAdminResponse {

    string message = 1;

}

message AddProductRequest{

    string product\_name = 1;

    double product\_price = 2;

    int32 stock\_quantity = 3;

    int32 stock\_keeping\_unit = 4;

    string status = 5;

}

message ProductIdResponse {

    string product\_id = 1;

}

message UpdateProductRequest {

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

    int32 stock\_quantity = 4;

    string stock\_keeping\_unit = 5;

    string status = 6;

}

message RemoveProductRequest{

    string product\_id = 1;

    string product\_name = 2;

    string status = 3;

}

message UpdatedListResponse {

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

    int32 stock\_quantity = 4;

    string stock\_keeping\_unit = 5;

    string status = 6;

}

service Customer{

    rpc AddCustomer (AddCustomerRequest) returns (AddCustomerResponse);

    rpc AuthenticateCustomer (AuthenticateCustomerRequest) returns (AuthenticateCustomerResponse);

    rpc ListAvailableProducts (Empty) returns (ListProductsResponse);

    rpc SearchProduct (SearchProductRequest) returns (ProductDetailsResponse);

    rpc AddToCart (AddToCartRequest) returns (AddToCartResponse);

    rpc PlaceOrder (PlaceOrderRequest) returns (PlaceOrderResponse);

}

message AddCustomerRequest{

    string user\_id = 1;

    string user\_name = 2;

    string password = 3;

    string role = 4;

}

message AddCustomerResponse {

    string user\_id = 1;

    string role = 4;

}

message AuthenticateCustomerRequest{

    string user\_name = 1;

    string password = 2;

}

message AuthenticateCustomerResponse {

    string message = 1;

}

message ListProductsResponse {

    string product\_name = 1;

    double product\_price = 2;

    string status = 3;

}

message SearchProductRequest {

    string product\_name = 1;

}

message ProductDetailsResponse{

    string product\_name = 1;

    double product\_price =2;

    string status = 3;

    int32 stock\_quantity = 4;

}

message AddToCartRequest{

    string user\_id = 1;

    string stock\_keeping\_unit = 2;

    string product\_id = 3;

}

message AddToCartResponse {

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

    string status = 4;

}

message PlaceOrderRequest{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

    string status = 4;

}

message PlaceOrderResponse{

    string product\_id = 1;

    string product\_name = 2;

    double product\_price = 3;

}