

## Design Document: Store Backend Part 2

Driver Program:

Tests assume functions within Product and Customer work correctly

```
main{
    try{
        create store object with default params
        Print "default constructor has succeeded"
    }catch{
        Print "default constructor has failed"
    }
    delete store object

    try{
        create store object with customized params
        Print "custom constructor has succeeded"
    }catch{
        Print "custom constructor has failed"
    }
    delete store object

    try{
        create store object with invalid params
        "invalid constructor has been accepted"
    }catch{
        Print "invalid constructor has been rejected"
    }
    delete store object

    try{
        create store object with default params
        create default product and insert into store
        attempt to use getProduct
        Print "default addProduct or getProduct has succeeded"
    }catch{
        Print "default addProduct or getProduct has failed"
    }
    delete store object
}
```

```
try{
    create store object with default params
    create custom product and insert into store
    attempt to use getProduct
    Print "custom addProduct or getProduct has succeeded"
}catch{
    Print "custom addProduct or getProduct has failed"
}
delete store object
```

```
try{
    create store object with default params
    create 2 identical products and insert into store
    attempt to use getProduct
    Print "duplicate products accepted"
}catch{
    Print "duplicate products rejected"
}
delete store object
```

```
try{
    create store object with default params
    create default customer and insert into store
    attempt to use getCustomer
    Print "default addCustomer or getCustomer has succeeded"
}catch{
    Print "default addCustomer or getCustomer has failed"
}
delete store object
```

```
try{
    create store object with default params
    create custom product and insert into store
    attempt to use getCustomer
    Print "custom addCustomer or getCustomer has succeeded"
}catch{
    Print "custom addCustomer or getCustomer has failed"
}
delete store object
```

```
try{
    create store object with default params
    create duplicate customers and insert into store
```

```

        Print "duplicate customers rejected"
    }catch{
        Print "duplicate customers accepted"
    }
    delete store object

    try{
        create store object with default params
        create default product and insert into store
        attempt to use takeShipment
        Print "takeShipment has succeeded"
    }catch{
        Print "takeShipment has failed"
    }
    delete store object

    try{
        create store object with default params
        create duplicate products and insert into store
        attempt to use takeShipment
        Print "takeShipment has taken in duplicate shipments"
    }catch{
        Print "takeShipment has rejected duplicate shipments"
    }
    delete store object

    try{
        create store object with default params
        create default product and insert into store
        create default customer and insert into store
        attempt to use sellProduct
        Print "sellProduct has succeeded"
    }catch{
        Print "sellProduct has failed"
    }
    delete store object

    try{
        create store object with default params
        create duplicate products and insert into store
        create default customer and insert into store
        attempt to use sellProduct
        Print "sellProduct has accepted duplicate products"
    }

```

```
}catch{
    Print "sellProduct has rejected duplicate products"
}
delete store object
```

```
try{
    create store object with default params
    create default product and insert into store
    create duplicate customers and insert into store
    attempt to use sellProduct
    Print "sellProduct has accepted duplicate customers"
}catch{
    Print "sellProduct has rejected duplicate customers"
}
delete store object
```

```
try{
    create store object with default params
    create customer with positive balance and insert into store
    attempt to use takePayment
    Print "takePayment has failed"
}catch{
    Print "takePayment has failed"
}
delete store object
```

```
try{
    create store object with default params
    create customer with negative balance and credit = true, insert into store
    attempt to use takePayment
    Print "takePayment with credit has succeeded"
}catch{
    Print "takePayment with credit has failed"
}
delete store object
```

```
try{
    create store object with default params
    create customer with negative balance and credit = false, insert into store
    attempt to use takePayment
    Print "takePayment without credit accepted"
}catch{
    Print "takePayment without credit rejected"
```

```
}
delete store object

try{
    create store object with default params
    create several different products and insert into store
    attempt to use listProducts
    Print "listProducts has succeeded"
}catch{
    Print "listProducts has failed"
}
delete store object

try{
    create store object with default params
    create several different customers and insert into store
    give each customer a few products
    attempt to use listCustomers
    Print "listCustomers has succeeded"
}catch{
    Print "listCustomers has failed"
}
delete store object
}
```