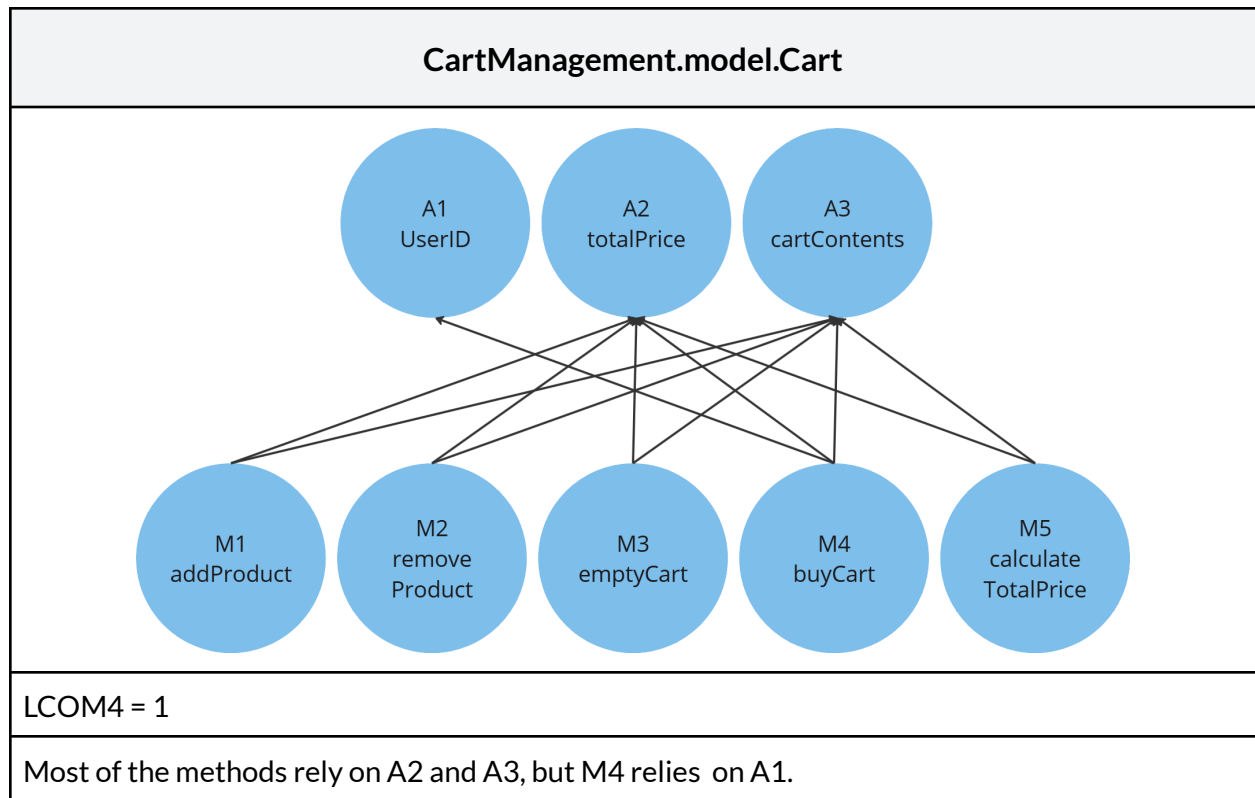


M02-A01 Project Module and API Design

By: Haley Fitzgerald, Nicole Leon, Heaven Thomas, Emira Hanna Yahya

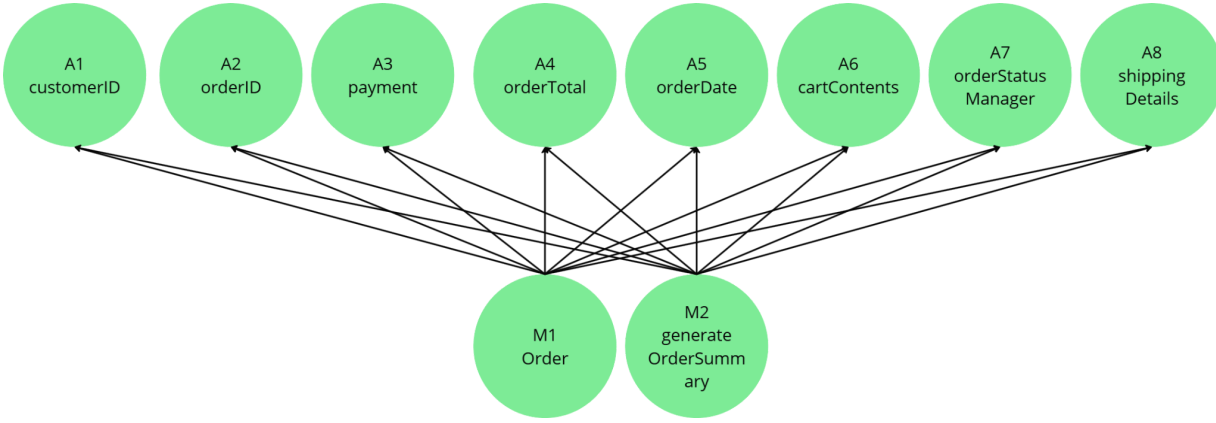
Project: Online Store Purchase

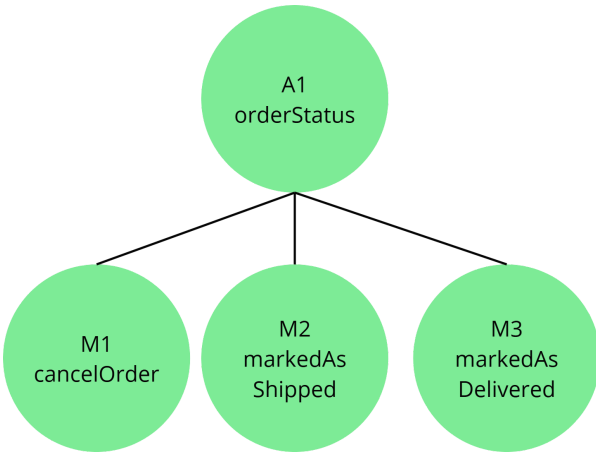
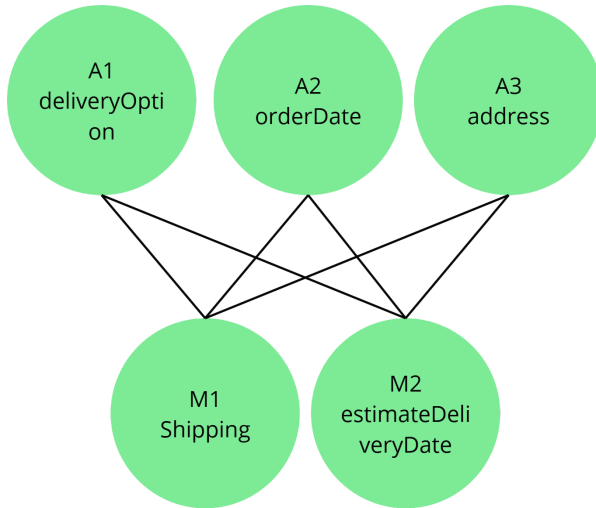
CartManagement



CartManagement.controller.CartController	CartManagement.view.CartContentView
<pre>graph BT; A1((A1 cartModel)) --> M1((M1 Cart Controller)); A2((A2 cartContents View)) --> M1</pre>	<pre>graph BT; A1((A1 JFrame)) --> M1((M1 CartContentView))</pre>
LCOM4 = 1	LCOM4 = 1
M1 requires A1 and A2 to work.	View requires JFrame and other swing components to work properly.

OrderManagement

OrderManagement.model.Order	
 <pre>graph TD; A1((A1 customerID)); A2((A2 orderID)); A3((A3 payment)); A4((A4 orderTotal)); A5((A5 orderDate)); A6((A6 cartContents)); A7((A7 orderStatus Manager)); A8((A8 shipping Details)); M1((M1 Order)); M2((M2 generate OrderSummary)); M1 --> A1; M1 --> A2; M1 --> A3; M1 --> A4; M1 --> A5; M1 --> A6; M1 --> A7; M1 --> A8; M2 --> A1; M2 --> A2; M2 --> A3; M2 --> A4; M2 --> A5; M2 --> A6; M2 --> A7; M2 --> A8;</pre>	
LCOM4 = 1	
Both methods rely on all the fields to fulfill their functionality	

OrderManagement.model.OrderStatusManager	OrderManagement.model.Shipping
 <pre>graph TD; A1((A1 orderStatus)); M1((M1 cancelOrder)); M2((M2 markedAs Shipped)); M3((M3 markedAs Delivered)); M1 --> A1; M2 --> A1; M3 --> A1;</pre>	 <pre>graph TD; A1((A1 deliveryOption)); A2((A2 orderDate)); A3((A3 address)); M1((M1 Shipping)); M2((M2 estimateDeliveryDate)); M1 --> A1; M1 --> A2; M1 --> A3; M2 --> A1; M2 --> A2; M2 --> A3;</pre>
LCOM4 = 1	LCOM4 = 1
M1, M2 and M3 require A1 to work.	M1 and M2 require A1, A2 and A3 for its logic.

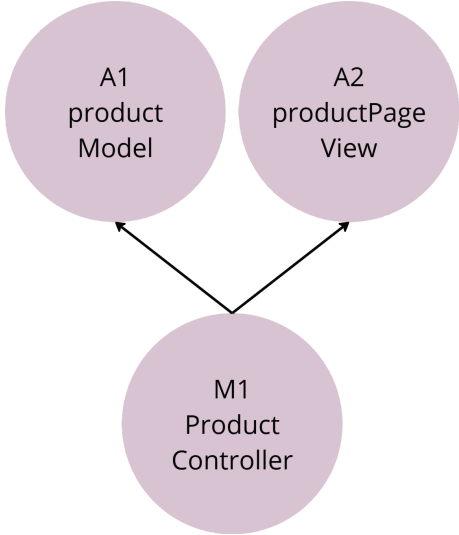
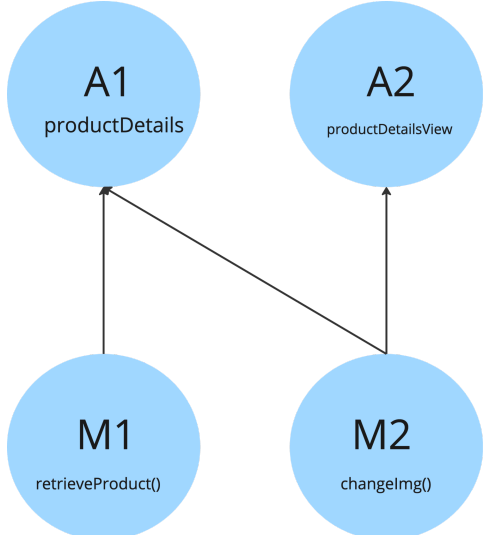
OrderManagement.controller.TrackOrder Controller	OrderManagement.controller.OrderCont roller
<pre> graph TD A1((A1 orderModel)) --- M1((M1 TrackOrder Controller)) A2((A2 trackOrder View)) --- M1 </pre>	<pre> graph TD A1((A1 orderModel)) --- M1((M1 Order Controller)) A2((A2 orderDetail View)) --- M1 A3((A3 orderConfirmed View)) --- M1 </pre>
LCOM4 = 1	LCOM4 = 1
M1 relies on A1 and A2 to work.	M1 requires A1 and A2 to work.

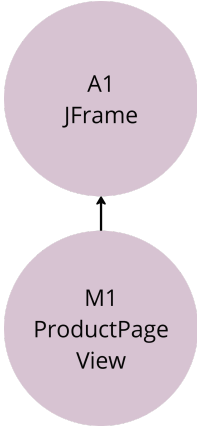
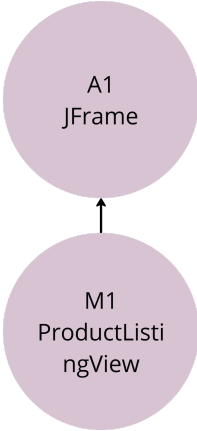
OrderManagement.view.O rderConfirmedView	OrderManagement.view.O rderDetailView	OrderManagement.view.Tr ackOrderView
<pre> graph TD A1((A1 JFrame)) --- M1((M1 Order Confirmed View)) </pre>	<pre> graph TD A1((A1 JFrame)) --- M1((M1 OrderDetail View)) </pre>	<pre> graph TD A1((A1 JFrame)) --- M1((M1 TrackOrder View)) </pre>
LCOM4 = 1	LCOM4 = 1	LCOM4 = 1
View requires JFrame and other swing components to work properly and do graphical displays.		

ProductManagement

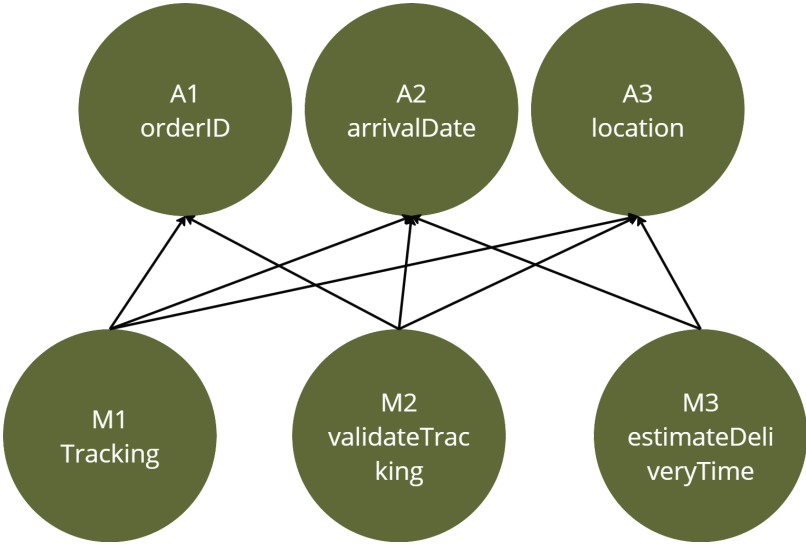
ProductManagement.model.Product	
<pre>graph TD; A1((A1 title)) --- M1((M1 Product)); A1 --- M2((M2 displayProductDetails)); A2((A2 description)) --- M1; A2 --- M2; A3((A3 productID)) --- M1; A3 --- M2; A4((A4 imageID)) --- M1; A4 --- M2; A5((A5 sellerID)) --- M1; A5 --- M2; A6((A6 dateListed)) --- M1; A6 --- M2; A7((A7 productCategory)) --- M1; A7 --- M2;</pre>	
LCOM4 = 1	
Both methods rely on all the fields to fulfill their functionality	

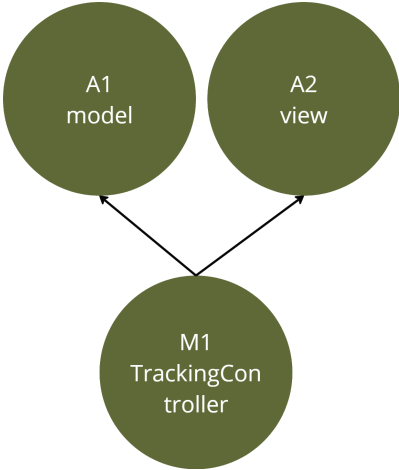
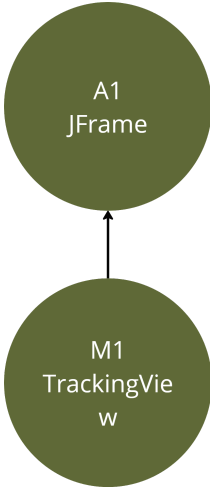
ProductManagement.model.Pricing	ProductManagement.model.Inventory
<pre>graph TD; A1((A1 price)) --- M1((M1 Pricing)); A1 --- M2((M2 apply Discount));</pre>	<pre>graph TD; A1((A1 quantity)) --- M1((M1 Inventory)); A1 --- M2((M2 updateStock)); A1 --- M3((M3 stockStatus)); A2((A2 inStock)) --- M1; A2 --- M2; A2 --- M3;</pre>
LCOM4 = 1	LCOM4 = 1
M1 & M2 require A1 to work.	M1, M2, & M3 rely on A1 and A2.

ProductManagement.controller.Product Controller	ProductManagement.controller.ViewPro ductDetailsController
 <pre> graph BT A1((A1 product Model)) --> M1((M1 Product Controller)) A2((A2 productPage View)) --> M1 </pre>	 <pre> graph BT A1((A1 productDetails)) --> M1((M1 retrieveProduct())) A2((A2 productDetailsView)) --> M2((M2 changeImg())) M1 --> A1 M2 --> A2 </pre>
LCOM4 = 1	LCOM4 = 1
M1 relies on A1 and A2 to work.	M1 requires A1 and A2 to work.

ProductManagement.view.ProductPageV iew	ProductManagement.view.ProductListing View
 <pre> graph BT A1((A1 JFrame)) --> M1((M1 ProductPage View)) </pre>	 <pre> graph BT A1((A1 JFrame)) --> M1((M1 ProductListi ngView)) </pre>
LCOM4 = 1	LCOM4 = 1
View requires JFrame and other swing components to work properly and do graphical displays.	

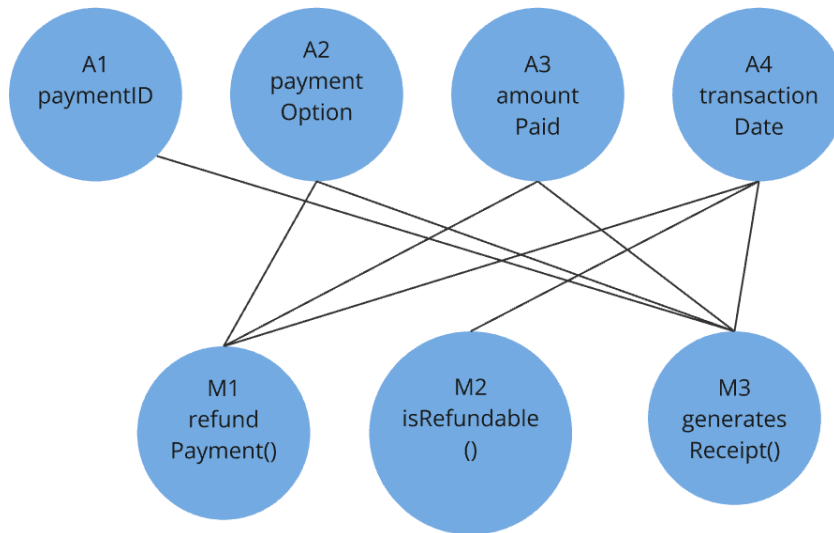
TrackingManagement

TrackingManagement.model.Tracking	
 <pre>graph BT; A1((A1 orderID)); A2((A2 arrivalDate)); A3((A3 location)); M1((M1 Tracking)); M2((M2 validateTracking)); M3((M3 estimateDeliveryTime)); M1 --> A1; M1 --> A2; M1 --> A3; M2 --> A1; M2 --> A2; M2 --> A3; M3 --> A2; M3 --> A3;</pre>	
LCOM4 = 1	
M1 and M2 rely on A1, A2 and A3, and M3 relies on A2 and A3.	

TrackingManagement.controller.TrackingController	TrackingManagement.view.TrackingView
 <pre>graph BT; A1((A1 model)); A2((A2 view)); M1((M1 TrackingController)); M1 --> A1; M1 --> A2;</pre>	 <pre>graph BT; A1((A1 JFrame)); M1((M1 TrackingView)); M1 --> A1;</pre>
LCOM4 = 1	LCOM4 = 1
M1 requires A1 and A2 to work.	View requires JFrame and other swing components to work properly.

PaymentManagement

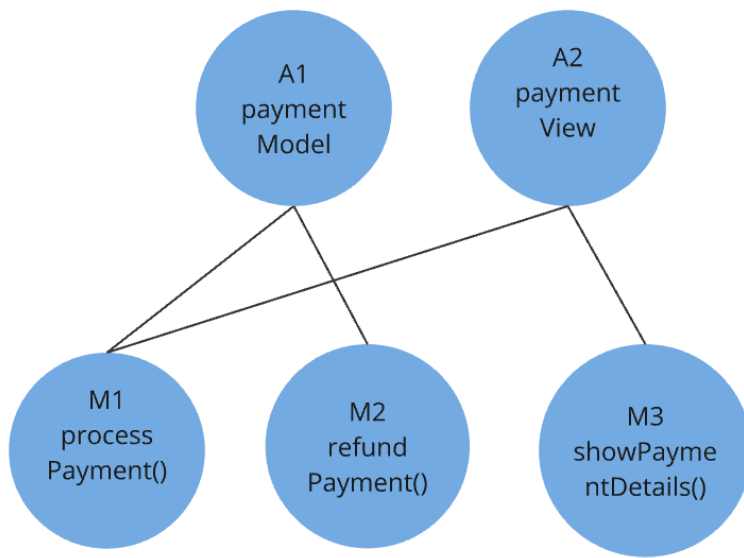
Payment



LCOM4 = 1

Both M1 and M2 depend on amountPaid and paymentOption. Both M2 and M1 depend on transactionDate. M3 depends on all attributes.

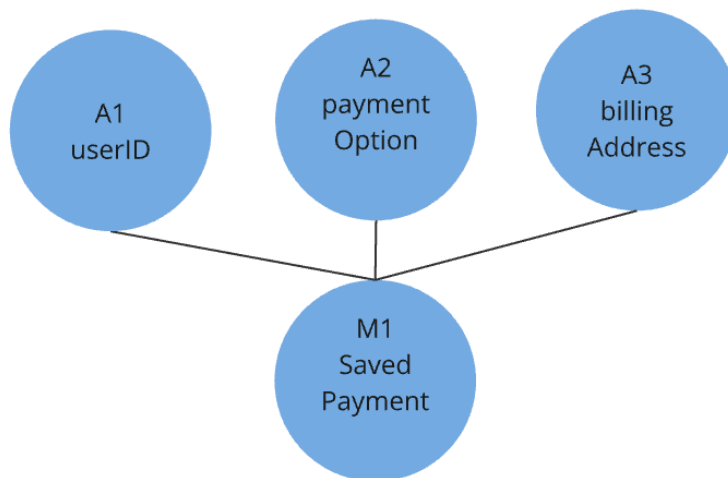
Payment Controller



LCOM4 = 1

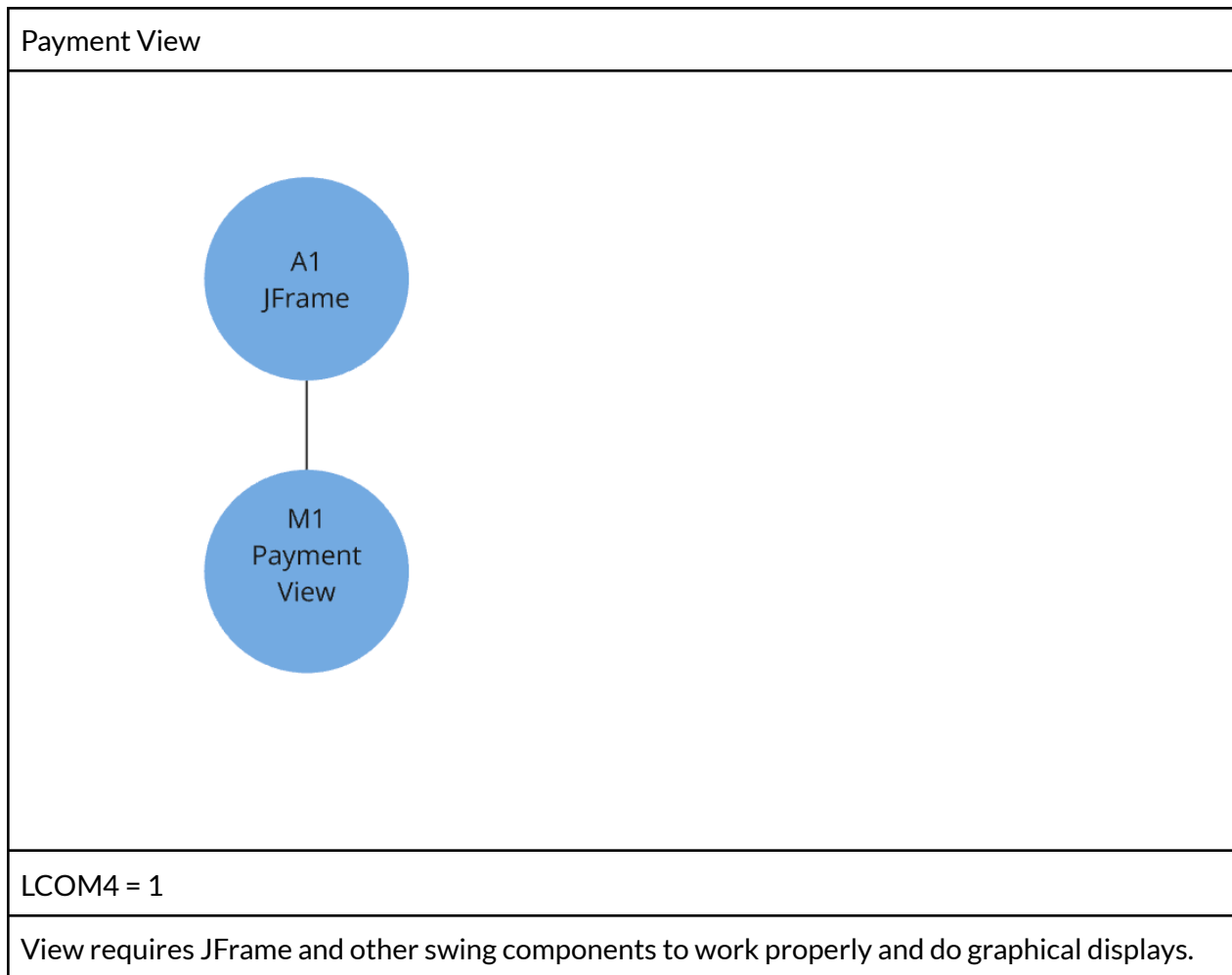
Both M1 and M2 depend on paymentMode. Both M1 and M3 depend on paymentView.

Saved Payment



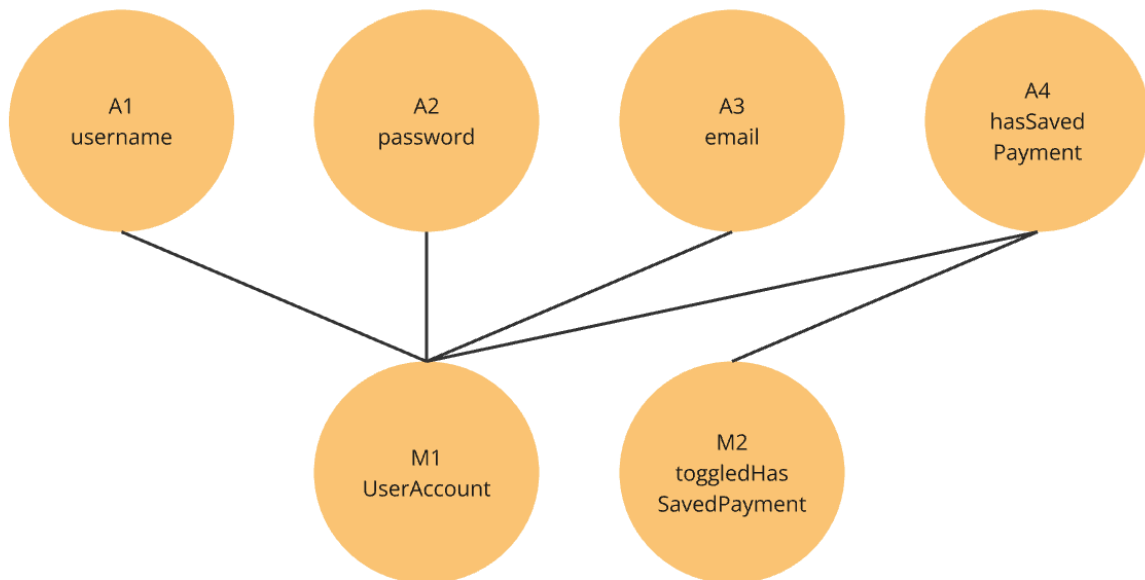
LCOM4 = 1

The constructor SavedPayment() depends on all attributes.




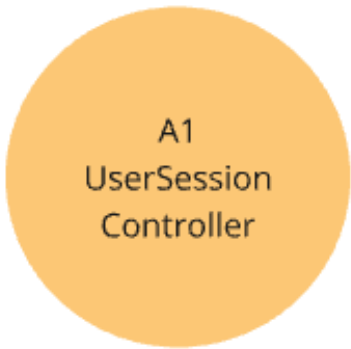
UserManagement

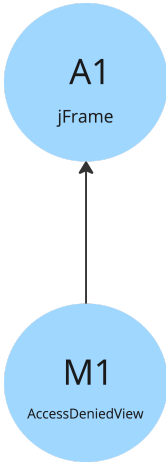
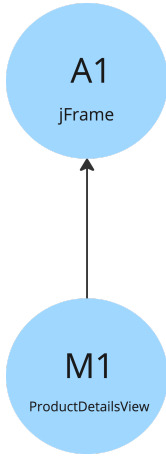
UserManagement.model.UserAccount

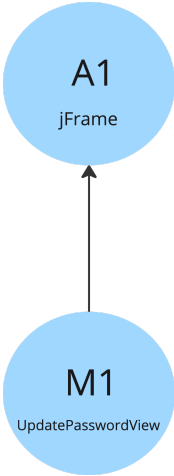
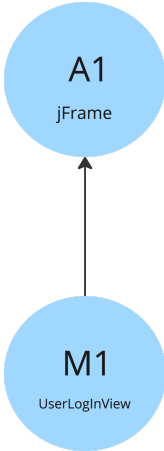


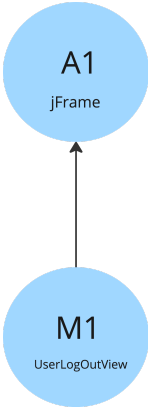
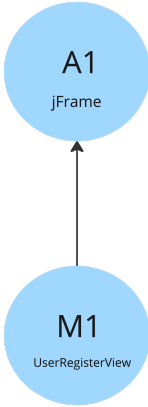
LCOM4 = 1

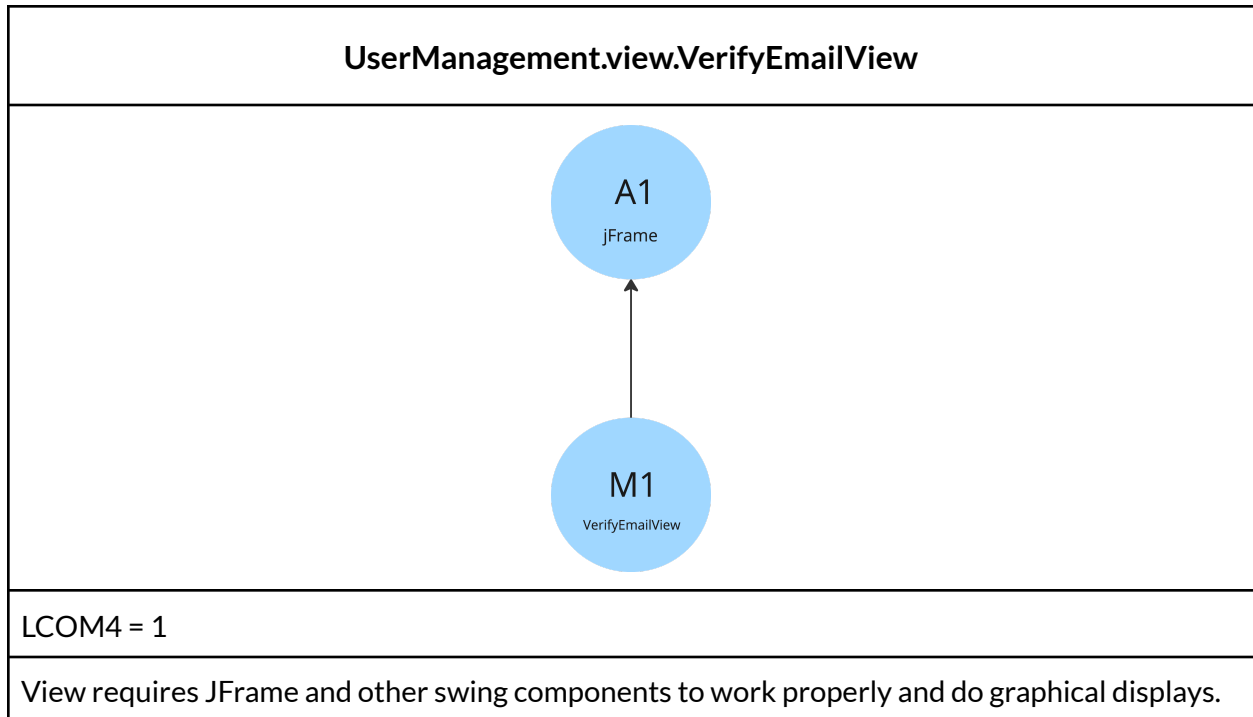
M1 requires A1, A2, A3 & A4 to work. M2 requires A4 to work.

UserManagement.controller.UpdatePasswordController	UserManagement.controller.UserSessionController
	
LCOM4 = 0	LCOM4 = 0
A1 has no methods.	A1 has no methods.

UserManagement.view.AccessDeniedView	UserManagement.view.ProductDetailsView
	
LCOM4 = 1	LCOM4 = 1
View requires JFrame and other swing components to work properly and do graphical displays.	View requires JFrame and other swing components to work properly and do graphical displays.

UserManagement.view.UpdatePassword View	UserManagement.view.UserLoginView
 <pre> graph BT M1((M1 UpdatePasswordView)) --> A1((A1 jFrame)) </pre>	 <pre> graph BT M1((M1 UserLoginView)) --> A1((A1 jFrame)) </pre>
LCOM4 = 1	LCOM4 = 1
View requires JFrame and other swing components to work properly and do graphical displays.	View requires JFrame and other swing components to work properly and do graphical displays.

UserManagement.view.UserLogoutView	UserManagement.view.UserRegisterView
 <pre> graph BT M1((M1 UserLogOutView)) --> A1((A1 jFrame)) </pre>	 <pre> graph BT M1((M1 UserRegisterView)) --> A1((A1 jFrame)) </pre>
LCOM4 = 1	LCOM4 = 1
View requires JFrame and other swing components to work properly and do graphical displays.	View requires JFrame and other swing components to work properly and do graphical displays.



Team Lead:

Team Lead ID + Name	Contribution in The Particular Assignment
nvl5303 + Nicole Leon	Tackled shipping and tracking management tools for user orders by defining appropriate models, views, and controllers for each use case. Aided with UserManagement API Design diagrams and LCOM4 scoring.

Team Members:

Team Member ID + Name	Contribution in The Particular Assignment
hmf5339 + Haley Fitzgerald	Created set of API Specifications for the use case view product details. Created Package ProductDetailManagement, class ViewProductDetailsController, class Product, and class ProductDetailsView. Filled out LCOM4 tables and diagrams for ProductDetailsView,

	ViewProductDetailsController, and Product. Also created all of the diagrams and tables for the views under user management.
ezy5092 + Emira Hanna Yahya	Stubbed out the attributes and behaviours for all the classes in CartManagement, OrderManagement, and helped organize the UserManagement Structure. Also helped write the model classes in ProductManagement, and consolidated them to fit with Haley's work to reduce code redundancy. Created diagrams and tables for the classes in ProductManagement, CartManagement, OrderManagement, and TrackingManagement.
hlt5125 + Heaven Thomas	Aided in creation of MVC classes for purchasing products. Filled out LCOM4 tables and created diagrams for Payment Management (Payment, Payment Controller, Saved Payment, Payment View)