

Integration Testing

Call Graph Based Integration:

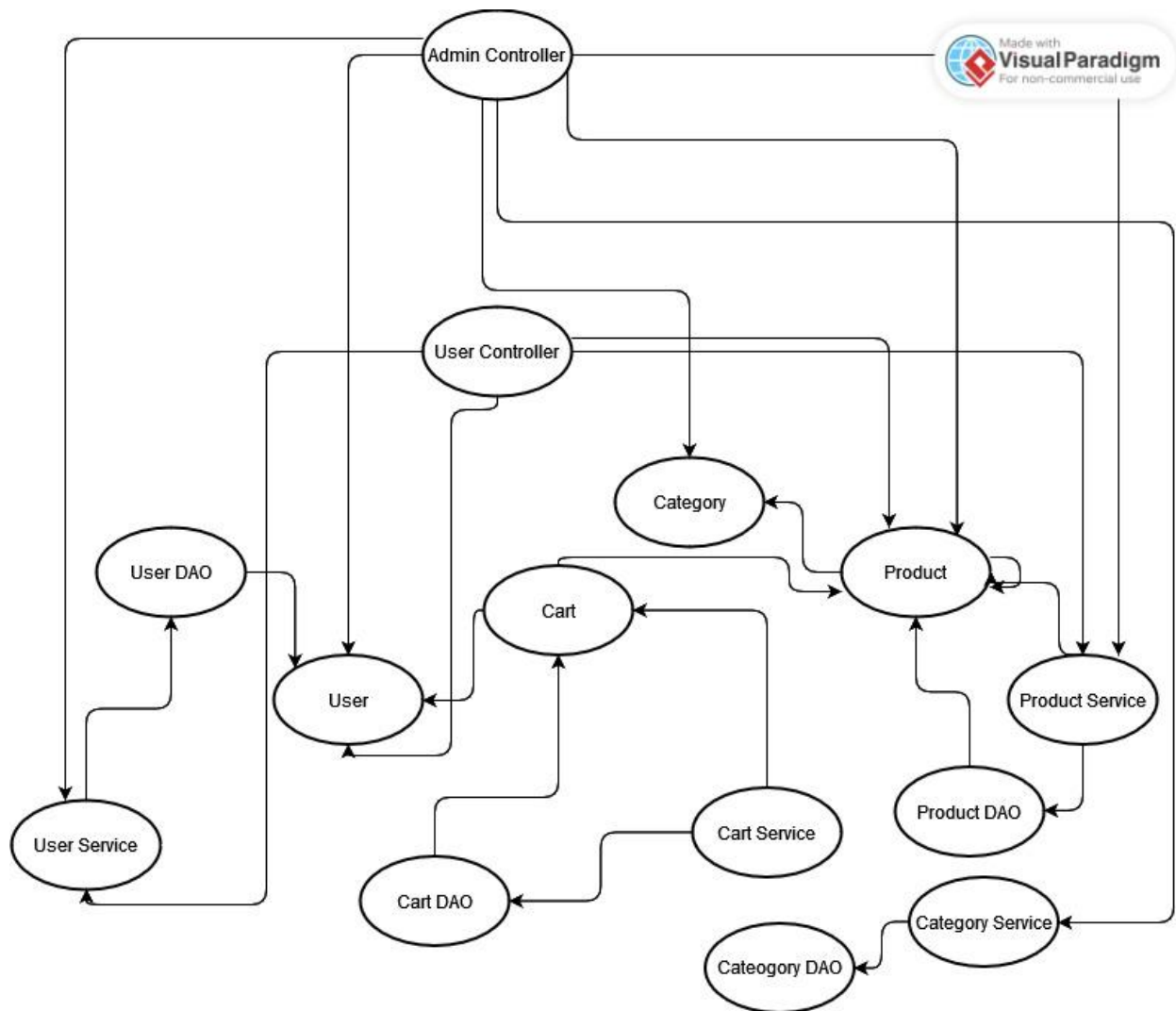


Figure 1.1 Call Graph For Ecommerce Spring Boot Project (Jay Gajera)

☐ **Adjacency Matrix:**

	AC	UC	P	C	UDAO	US	CDA O	CS	PS	PDAO	CtS	U	Ct	CtDAO
AC			X			X			X		X	X	X	
UC			X			X			X			X		
P	X	X		X					X	X			X	
C			X				X	X				X		
UDAO						X						X		
US	X	X			X									
CDAO				X				X						
CS				X			X							
PS	X	X	X							X				
PDAO			X						X					
CtS	X												X	X
U	X	X		X	X									
Ct	X		X								X			
CtDAO											X			

Test Cases

TID	Purpose	Description/Code	Expected Result	Actual Result
2T20.1	Checking the Category id is get	Checking the Category id is get	Get correctly	Get correctly
2T20.2	Checking the Category name is get	Checking the Category name is get	Get correctly	Get correctly
2T20.3	Checking the Category name is set	Checking the Category name is set	Set correctly	Set correctly
2T20.4	Checking the Category id is set	Checking the Category id is set	Set correctly	Set correctly

TID	Purpose	Description/Code	Expected Result	Actual Result
2T15.1	Admin Accesses Product Management Page	ModelAndView with view name "products" and a list of products added to the model..	ModelAndView with view name "products" and a list of products added to the model..	Admin successfully access page for product management.
2T15.2	To verify that the admin can access the page for adding a new product	ModelAndView with view name "productsAdd" and a list of categories added to the model.	ModelAndView with view name "productsAdd" and a list of categories added to the model.	Admin successfully access page for adding new product.
2T15.3	To verify the addition of a new product by the admin.	Redirect to the product management page with the newly added product in the list.	Redirect to the product management page with the newly added product in the list.	Admin successfully add new product.
2T15.4	To verify that the admin can successfully update a product.	To verify that the admin can successfully update a product.	The admin can successfully update a product.	Admin is not able to update new product.
2T15.5	To verify that the admin can successfully remove a product.	To verify that the admin can successfully remove a product.	Redirect to the product management page with the product removed from the list.	Admin is not able to remove a product.

TID	Purpose	Description/Code	Expected Result	Actual Result
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2T19.1	To verify that the admin can access the category management page.	ModelAndView with view name "categories" and a list of categories added to the model.	ModelAndView with view name "categories" and a list of categories added to the model.	Admin successfully access page for category management.
2T19.2	To verify the addition of a new category by the admin.	Redirect to the category management page with the newly added category in the list.	Redirect to the category management page with the newly added category in the list.	Admin is not able to add new category.
2T19.3	To verify that the admin can successfully delete a category.	Redirect to the category management page with the category deleted from the list.	Redirect to the category management page with the category deleted from the list.	Admin is not able to delete a category.
2T19.4	To verify that the admin can successfully update a category name.	Redirect to the category management page with the updated category name in the list.	Redirect to the category management page with the updated category name in the list.	Admin successfully update a category.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T18.1	Checking the Product Id is set	Checking the Product Id is set	Set correctly	Set correctly
2T18.2	Checking the Product Name is set	Checking the Product Name is set	Set correctly	Set correctly
2T18.3	Checking the Product Category is set	Checking the Product Category is set	Set correctly	Set correctly
2T18.4	Checking the Product Description is set	Checking the Product Description is set	Set correctly	Set correctly
2T18.5	Checking the Product Price is set	Checking the Product Price is set	Set correctly	Set correctly
2T18.6	Checking the Product Image is set	Checking the Product Image is set	Set correctly	Set correctly
2T18.7	Checking the Product Weight is set	Checking the Product Weight is set	Set correctly	Set correctly

2T18.8	Checking the Product Quantity is set	Checking the Product Quantity is set	Set correctly	Set correctly
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TID	Purpose	Description/Code	Expected Result	Actual Result
2T17.1	Checking if Admin role is correct retrieve	Checking if Admin role is correct retrieve	Verify Admin and show Admin dashboard	Verify Admin and show Admin dashboard
2T17.2	Checking if System is robust on Other role [except Admin]	Checking if System is robust on Other role [except Admin]	System show message of invalid credentials	System does not show message.
2T17.3	Checking if Entered credentials are invalid	Checking if Entered credentials are invalid	System show proper message when user not found.	Show Exception.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T16.1	To verify that the admin can log in successfully.	ModelAndView with view name "adminHome" and the admin user object in the model.	ModelAndView with view name "adminHome" and the admin user object in the model.	Admin login successfully
2T16.2	To verify that the admin can access the user management page.	ModelAndView with view name "displayCustomers" and a list of users in the model.	ModelAndView with view name "displayCustomers" and a list of users in the model.	Admin successfully access the user management page.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T14.1	To verify that a new category can be successfully added.	Newly added category with the correct name.	Newly added category with the correct name.	Newly added category with the correct name as expected.
2T14.2	To verify that the list of categories can be retrieved.	List of existing categories.	List of existing categories.	List of existing categories as expected.

2T14.3	To verify that an existing category can be successfully deleted.	To verify that an existing category can be successfully deleted.	true indicating successful deletion.	true indicating successful deletion as expected.
2T14.4	To verify that an existing category can be successfully updated.	To verify that an existing category can be successfully updated.	Updated category with the correct name.	Updated category with the correct name as expected.
2T14.5	To verify that a category can be retrieved by its ID.	To verify that a category can be retrieved by its ID.	Category with the correct ID.	Category with the correct ID as expected..

TID	Purpose	Description/Code	Expected Result	Actual Result
2T13.1	To verify that a category can be set for a product.	The product's category should be the assigned category.	The product's category should be the assigned category.	Category can be set for a product as expected.
2T13.2	To verify that a product can be set for a category.	The category's associated product should be the assigned product.	The category's associated product should be the assigned product.	Product can be set for a category as expected.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T12.1	To verify that the getAllUsers method retrieves a list of users.	List of users retrieved from the userDao.	List of users retrieved from the userDao.	List of users retrieved from the userDao.
2T12.2	To verify that the SaveUser method save User	Save User successfully	Save User successfully	Save User successfully

TID	Purpose	Description/Code	Expected Result	Actual Result
2T11.1	To verify that the	List of products should not	List of products should	Contain List of Products

	getProducts method retrieves a list of products.	be null, and it should contain the expected number of products.	not be null, and it should contain the expected number of products.	as expected.
2T11.2	To verify that the addProduct method adds a product successfully.	The added product should be returned, and it should be present in the list of products retrieved by getProducts	The added product should be returned, and it should be present in the list of products retrieved by getProducts	The added product is returned, and it is present in the list of products retrieved by getProducts so works as expected.
2T11.3	To verify that the getProduct method retrieves a product by its ID.	The returned product should not be null, and it should have the expected ID.	The returned product should not be null, and it should have the expected ID.	The returned product is not null, and it have the expected ID as expected.
2T11.4	To verify that the updateProduct method updates a product successfully.	The updated product should be returned, and it should have the expected modifications.	The updated product should be returned, and it should have the expected modifications.	The updated product is returned, and it have the expected modification.
2T11.5	To verify that the deleteProduct method deletes a product successfully.	The method should return true, indicating that the product was successfully deleted.	The method should return true, indicating that the product was successfully deleted.	The method return true, indicating that the product was successfully deleted

TID	Purpose	Description/Code	Expected Result	Actual Result
2T10.1	To verify that the getAllUser method retrieves a list of users.	List of users should not be null, and it should contain the expected number of users.	List of users should not be null, and it should contain the expected number of users.	List of users is not null, and it contain the expected number of users.
2T10.2	To verify that the saveUser method adds a user successfully.	The added user should be returned, and it should be present in the list of users retrieved by getAllUser	The added user should be returned, and it should be present in the list of users retrieved by getAllUser	The added user is returned, and it e present in the list of users retrieved by getAllUser
2T10.3	To verify that the getUser method retrieves a user by their username and password.	The returned user should not be null, and it should have the expected username and password.	The returned user should not be null, and it should have the expected username and password.	The returned user is not null, and it have the expected username and password.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T9.1	To verify that the addCart method adds a cart successfully.	The added cart should be returned.	The added cart should be returned.	The added cart is returned.
2T9.2	To verify that the updateCart method updates a cart successfully.	The cart should be updated with the expected modifications.	The cart should be updated with the expected modifications.	The cart is updated with the expected modifications.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T8.1	To verify getCards method returns a list of Cart objects.	Method returns a list of Cart objects.	Method returns a list of Cart objects.	Work successfully.
2T8.2	The addCart method takes a Cart object as a parameter and adds it to the data store	takes a Cart object as a parameter and adds it to the data store	takes a Cart object as a parameter and adds it to the data store	Work successfully.
2T8.3	The updateCart method takes a Cart object as a parameter and updates its details.	akes a Cart object as a parameter and updates its details.	akes a Cart object as a parameter and updates its details.	Work successfully.
2T8.4	The deleteCart method takes a Cart object as a parameter and deletes it from the data store.	method takes a Cart object as a parameter and deletes it from the data store.	method takes a Cart object as a parameter and deletes it from the data store.	Work successfully.

TID	Purpose	Description/ Code	Expected Result	Actual Result
2T7.5	To verify that the getProduct method retrieves a list of		method retrieves a list of products.	method retrieves a list of products.

	products.			
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TID	Purpose	Description/Code	Expected Result	Actual Result
2T6.1	To verify that a user can successfully log in, and the associated products are retrieved.	To verify that a user can successfully log in, and the associated products are retrieved.	The user should be successfully logged in, and the products associated with the user should be retrieved and displayed on the "index" page.	Functionality is incomplete for adding to Cart.
2T6.2	To verify the getProduct() method is working accurately	To verify the getProduct() method is working accurately	Retrieve list of products	Work successfully

TID	Purpose	Description/Code	Expected Result	Actual Result
2T5.1	To verify that a user can successfully log in with correct credentials.	The user should be successfully logged in, and the ModelAndView should be directed to the "index" page.	The user should be successfully logged in, and the ModelAndView should be directed to the "index" page.	Work successfully.
2T5.2	To verify that a user cannot log in with incorrect credentials.	The user not able to login with incorrect credentials	The user not able to login with incorrect credentials	The user not able to login with incorrect credentials

TID	Purpose	Description/Code	Expected Result	Actual Result
2T4.1	To verify productDao get all products	Get all products.	Get all products.	Works successfully.
2T4.2	To verify productDao add product.	Add product.	Add product.	Works successfully.
2T4.3	To verify get a Product by id.	Get product by id.	Get product by id.	Works successfully.
2T4.4	To verify delete Product	Delete Product	Delete Product	Unable to delete.
2T4.5	To verify update Product	Update Product	Update Product	Unable to update.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T3.1	To verify that a new cart can be created and associated with a user.	The user should be successfully associated with the cart.	The user should be successfully associated with the cart.	Does not work.
2T3.2	To verify that a product can be removed from the cart associated with a user.	The product should be successfully removed from the user's cart	The product should be successfully removed from the user's cart	Does not work

TID	Purpose	Description/Code	Expected Result	Actual Result
2T2.1	To verify that a user can successfully log out.	User logout his account.	User logout his account.	Unable to logout.
2T2.2	To verify User can view his profile.	User view his profile	User view his profile	Unable to view profile.

TID	Purpose	Description/Code	Expected Result	Actual Result
2T1.1	To verify that the list of carts can be retrieved from the database.	The list of carts should be successfully retrieved from the database, and the returned list should not be empty.	The list of carts should be successfully retrieved from the database, and the returned list should not be empty.	Successfully Work.
2T1.2	To verify that an existing cart can be successfully updated in the database.	The existing cart should be successfully updated in the database, and the returned Cart object should match the updated cart.	The existing cart should be successfully updated in the database, and the returned Cart object should match the updated cart.	Successfully Work.
2T1.3	To verify that an existing cart can be successfully deleted from the database	The existing cart should be successfully deleted from the database, and the returned Cart object from deleteCart should be null.	The existing cart should be successfully deleted from the database, and the returned Cart object from deleteCart should be null.	Successfully Work.
2T1.4	To verify that a	he new cart should be	he new cart should be	Successfully

	new cart can be successfully added to the database.	successfully added to the database, and the returned Cart object should match the added cart.	successfully added to the database, and the returned Cart object should match the added cart.	Work
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