



**Dhirubhai Ambani
University**

IT314 - Software Engineering

Group - 28

UNIT TESTING

Backend:

- Coverage:

Coverage report: 95%				
File	statements	missing	excluded	coverage
app \ __init__.py	26	22	0	15%
app \ services \ __init__.py	0	0	0	100%
app \ services \ ai_service.py	54	0	0	100%
app \ services \ categorizer_service.py	69	0	0	100%
app \ services \ expense_service.py	90	18	0	80%
app \ services \ group_service.py	256	28	0	89%
app \ services \ invitation_service.py	36	5	0	86%
app \ services \ notification_service.py	53	15	0	72%
tests \ test_ai_service.py	254	1	0	99%
tests \ test_categorizer_service.py	319	2	0	99%
tests \ test_expense_service.py	224	2	0	99%
tests \ test_group_service.py	2433	102	0	96%
tests \ test_invitation_service.py	268	6	0	98%
tests \ test_notification_service.py	111	1	0	99%
Total	4193	202	0	95%

Test Case Pass/Fail:

Result	Test	Duration	Links
Passed	tests/test_notification_service.py: TestNotificationService: test_mark_as_read_success	4 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_mark_as_read_not_found	3 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_mark_as_read_filters_by_user	3 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_log_notification_with_related_expense	3 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_log_notification_success	4 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_log_notification_handles_exception	2 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_get_notifications_returns_list	3 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_get_notifications_ordered_by_date	3 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_delete_invitation_notification_success	4 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_delete_invitation_notification_filters_correctly	3 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_create_raw_notification_success	3 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_create_notification_success	4 ms	
Passed	tests/test_notification_service.py: TestNotificationService: test_create_notification_includes_link	3 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_wrong_user_mutation	3 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_wrong_user	3 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_uses_fallback_name	5 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_not_found_mutation	3 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_not_found	56 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_invalid_action_mutation	2 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_invalid_action	1 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_empty_action	1 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_deletes_original_notification	10 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_decline_updates_status	4 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_decline_success_mutation	5 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitation_decline_success	5 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitationCreates_notification_on_accept	4 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitationCreates_notification_mutation	9 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitationAccept_updates_status	5 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitationAccept_success_mutation	8 ms	

Result	Test	Duration	Links
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitationAccept_success	5 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitationAcceptCreates_member	5 ms	
Passed	tests/test_invitation_service.py: TestInvitationServiceComprehensiveMerged: test_respond_to_invitationAcceptAdds_memberMutation	10 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_zero_amount_detailed	4 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_user_not_member_detailed	4 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_successful_with_metadata	6 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_string_amount_conversion	8 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_split_creation_fails_detailed	4 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_non_numeric_amount_detailed	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_negative_amount_detailed	2 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_missing_to_id_detailed	2 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_missing_from_id_detailed	2 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_missing_amount_detailed	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_large_amount_detailed	5 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_zero_amount	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_success	12 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_split_insert_fails	8 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_small_amount	5 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_same_from_and_to	7 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_not_member	3 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_negative_amount	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_missing_to_id	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_missing_from_id	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_missing_amount	2 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_large_amount	5 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_invalid_amount_string	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_float_precision	6 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_expense_insert_fails	5 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_empty_data	1 ms	
Passed	tests/test_group_service.py: TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balance_deletes_pending_notifications	11 ms	

File D:/SE_project/Coincious-Smart-Expense-Tracker/backend/report.html?sort=result&visible=passed,skipped,error,xfailed,xpassed,rerun	
Passed	tests/test_group_service.py:TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balanceCreatesSplit
Passed	tests/test_group_service.py:TestSettleGroupBalanceComprehensiveMerged: test_settle_group_balanceCreatesExpense
Passed	tests/test_group_service.py:TestSettleGroupBalanceComprehensiveMerged: test_settle_expenseCreationFailsDetailed
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_userDoesNotExist
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_upsertUserProfileFails
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_successfulInvitation
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_pendingInvitation
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_notificationCreationFails
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_missingEmail
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_inviteSelf
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_invitationCreationFails
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_invalidUserToken
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_groupNotFoundOrAccessDenied
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_exceptionHandling
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_alreadyAMember
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberUserNotGroupMember
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberUpsertFails
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberTargetUserNotInPublic
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberTargetUserNotFoundAnywhere
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberTargetUserExistsInPublic
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberNotificationIncludesGroupName
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberNoneData
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberNoUser
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberNoEmailInData
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberInviteSelf
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberGroupNotFound
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberEmptyEmail
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberEmailCaseInsensitive
Passed	tests/test_group_service.py:TestAddGroupMemberComprehensiveMerged: test_addGroupMemberAlreadyMember
Passed	tests/test_group_service.py:TestGetGroupExpensesMutations: test_get_group_expensesNotMember

File D:/SE_project/Coincious-Smart-Expense-Tracker/backend/report.html?sort=result&visible=passed,skipped,error,xfailed,xpassed,rerun	
Passed	tests/test_group_service.py:TestGetGroupExpensesMutations: test_get_group_expensesNoExpenses
Passed	tests/test_group_service.py:TestGetGroupExpensesMutations: test_get_group_expensesMemberAccess
Passed	tests/test_group_service.py:TestGetGroupMembersMutations: test_get_group_membersSuccessNoUsers
Passed	tests/test_group_service.py:TestGetGroupMembersMutations: test_get_group_membersFetchErrorNoData
Passed	tests/test_group_service.py:TestGetGroupBalancesComprehensive: test_get_group_balancesNotMember
Passed	tests/test_group_service.py:TestGetGroupBalancesComprehensive: test_get_group_balancesNoMembers
Passed	tests/test_group_service.py:TestGetGroupBalancesComprehensive: test_get_group_balancesMemberCheckWithData
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupWithManyExpenses
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupWithExpenses
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupUserIdNone
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupUser_idEmptyString
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupUnauthorizedStringConversion
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupUnauthorized
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupSuccessful
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupStringCreatedBy
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupSplitDeletionWithMultipleExpenses
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupSplitDeletionFails
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupPermissionNoneCreatedBy
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupNumericUserId
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupNotificationsDeletionFails
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupNotificationsDeleted
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupNotfound
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupNoExpensesInList
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupMixedTypeIds
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupMembersDeletionFails
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupMembersDeleted
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupInvitationsDeletionFails
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupInvitationsDeleted
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupGroup_idNone
Passed	tests/test_group_service.py:TestDeleteGroupMutations: test_delete_groupGroup_idEmptyString

report.html	
File D:/SE_project/Coincious-Smart-Expense-Tracker/backend/report.html?sort=result&visible=passed,skipped,error,xfailed,xpassed,rerun	
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_group_check_has_no_data_attribute
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_final_delete_no_data
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_final_delete_fails
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_final_delete_empty_data
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_expenses_fetch_fails
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_expenses_deletion_fails
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_expenses_delete_fails
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_expense_ids_empty_list
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_exception_in_group_fetch
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_exception_in_cascade
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_exception_handling
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_created_by_none
Passed	tests/test_group_service.py::TestDeleteGroupMutations::test_delete_group_created_by_empty_string
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_with_special_characters
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_whitespace_name
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_successful_creation
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_returns_correct_status
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_preserves_group_name
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_none_name
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_no_name
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_inserts_to_correct_table
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_includes_creator_id
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_exception_handling
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_error_on_member_add
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_error_on_insert
Passed	tests/test_group_service.py::TestCreateNewGroupMutations::test_create_group_adds_creator_as_member
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_zero_amount
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_very_small_amount
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_very_large_amount
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_string_amount

report.html	
File D:/SE_project/Coincious-Smart-Expense-Tracker/backend/report.html?sort=result&visible=passed,skipped,error,xfailed,xpassed,rerun	
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_not_member
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_missing_fields
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_invalid_amount
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balance_float_precision
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_settle_group_balanceCreates_expense
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_zero_balance
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_success_single_group
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_special_characters_in_name
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_rpc_exception
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_preserves_metadata
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_none_values
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_multiple_groups
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_large_balance_values
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_float_conversion
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_empty_result
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_empty_list
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_user_groups_calls_correct_rpc
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_group_members_fetch_fails
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_group_balances_success
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_group_balances_not_member
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_get_group_balances_no_members
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_delete_group_with_related_data
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_delete_group_success
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_delete_group_not_found
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_delete_group_not_creator
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_delete_group_delete_fails
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_whitespace_only_name
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_very_long_name
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_success
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_no_name

File D/SE_project/Coincious-Smart-Expense-Tracker/backend/report.html?sort=result&visible=passed,skipped,error,xfailed,xpassed,reun	
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_member_insert_fails_detailed
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_member_add_fails
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_insert_returns_no_data
Passed	tests/test_group_service.py::TestGroupServiceComprehensiveMerged::test_create_new_group_insert_returns_empty_list
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_get_group_expenses_zero_amount
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_get_group_expenses_use_total_amount_not_amount
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_get_group_expenses_not_member
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_get_group_expenses_negative_amount
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_get_group_expenses_large_amount
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_get_group_expenses_empty_split
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_get_group_expenses_amount_conversion
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_sums_correctly
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_sorted_by_value_descending
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_single_category
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_previous_month
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_many_categories
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_exception
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_default_period
Passed	tests/test_expense_service.py::TestExpenseServiceComprehensiveMerged::test_donut_data_current_month
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_success
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_none_mime_type
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_none_image_bytes
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_no_model
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_json_parse_error
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_handles_bytes
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_gemini_error
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_empty_mime_type
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_parse_bill_image_empty_image_bytes
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_none_user_id
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_none_description

File D/SE_project/Coincious-Smart-Expense-Tracker/backend/report.html?sort=result&visible=passed,skipped,error,xfailed,xpassed,reun	
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_new_category
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_existing_keyword
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_existing_category
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_empty_user_id
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_empty_description
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_database_error_on_update
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_database_error_on_insert
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_database_error_on_check
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_ruleCreates_new_category
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_ruleConverts_description_to_lowercase
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_avoids_duplicate_keywords
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_learn_new_rule_adds_keyword_to_existing
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_success
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_returns_dict
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_none_user_id
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_none_data
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_no_data_attribute
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_no_data
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_handles_empty_response
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_empty_user_id
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_get_user_rules_database_error
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_with_user_rules
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_partial_word_matching
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_none_user_id
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_none_description
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_no_user_rules
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_no_model
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_no_matches
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_multiple_matches
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_gemini_error

Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_empty_user_id	6 ms
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_empty_description	8 ms
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_case_insensitive_matching	2 ms
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_ai_returns_other	4 ms
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_ai_returns_none	4 ms
Passed	tests/test_categorizer_service.py::TestCategoryServiceComprehensive::test_find_category_ai_invalid_json	3 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_no_groups	9 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_no_expenses	4 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_multiple_groups	8 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_group_without_name	4 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_group_with_zero_balance	11 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_group_with_positive_balance	5 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_group_with_negative_balance	8 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_exception_on_expenses_fetch	4 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_date_range_ninety_days	8 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_chat_with_history	3 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_chat_temperature_and_tokens	4 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_chat_simple_message	7 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_chat_limits_history_to_5	5 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_chat_includes_financial_data	4 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_chat_empty_history	4 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_chat_api_error	3 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_cache_hit	2 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_budget_set	7 ms
Passed	tests/test_ai_service.py::TestAIServiceMutations::test_budget_fetch_exception	6 ms

Frontend:

- Coverage:

% Coverage report from v8					
File	%Stmts	%Branch	%Funcs	%Lines	Uncovered Line #s
All files	49.51	41.26	51.93	50.68	
src	86.48	66.66	89.47	88.4	
App.tsx	86.48	66.66	89.47	88.4	39-59,227-229,268
src/components	9.18	7.27	10.52	9.89	
...berDialog.tsx	12.82	11.76	16.66	13.51	28-29,37-135
Layout.tsx	0	0	0	0	35-315
...eUpDialog.tsx	21.05	20	33.33	22.22	46-122
...mponents/pages	50.19	42.72	54.56	51.41	
AddExpense.tsx	0.22	0	0	0.24	63-1220
AuthVerify.tsx	0	0	0	0	7-37
Chatbot.tsx	92.85	86.36	93.75	94.11	101-102,355
Dashboard.tsx	79.04	66.03	78.08	84.05	...1168,1255-1266
...portModal.tsx	0	0	0	0	25-281
GroupDetail.tsx	80.8	60.49	83.33	80.89	...54,261,267,274
Groups.tsx	80.17	67.92	88.23	80.18	...54,272-274,451
Landing.tsx	86.95	83.33	75	86.95	383,451,487
Login.tsx	82.75	62.5	90	84.21	...,94-95,113,320
...fications.tsx	0	0	0	0	38-653
...ResetPage.tsx	96.55	83.33	80	96.42	87
Profile.tsx	78.43	62.54	90.32	79.85	...00,708-712,727
Register.tsx	89.33	74.13	100	90	...00-102,106-107
Settings.tsx	97.22	85.71	87.5	97.14	304
Support.tsx	95	100	92.3	100	
src/components/ui	47.42	22.22	40	47.91	
...hFallback.tsx	20	0	0	20	7-13
...ngContext.tsx	8.57	0	0	8.82	15-19,27-87
ThemeContext.tsx	16.66	0	0	16.66	13-17,25-39
accordion.tsx	100	100	100	100	
alert-dialog.tsx	100	100	100	100	
avatar.tsx	100	100	100	100	
badge.tsx	100	66.66	100	100	35
button.tsx	100	100	100	100	
card.tsx	0	0	0	0	
checkbox.tsx	100	100	0	100	
dialog.tsx	100	100	90	100	
...down-menu.tsx	100	50	20	100	65
input.tsx	0	0	0	0	

	0	0	0	0	
input.tsx	0	0	0	0	
label.tsx	100	100	100	100	
logo.tsx	100	100	100	100	
radio-group.tsx	100	100	0	100	
scroll-area.tsx	100	80	100	100	44
select.tsx	100	0	0	100	33-80
separator.tsx	100	0	0	100	10-11
sheet.tsx	100	0	0	100	50-68
sonner.tsx	100	100	100	100	
switch.tsx	100	100	0	100	
tabs.tsx	100	100	100	100	
textarea.tsx	0	0	0	0	
utils.ts	100	100	100	100	
src/lib	100	100	100	100	
utils.ts	100	100	100	100	

- Test Case Pass/Fail:

The screenshot shows the Vitest test runner interface running on a local host. The results summary at the top right indicates 194 Passes, 0 Failures, and a Total duration of 26.67s. The left side of the interface displays a tree view of test files, all of which have passed, with execution times listed next to each file name. The overall status is green, signifying a successful build.

Pass	Fail	Total
194	0	194
Pass	Fail	Total

Files: 12
Pass: 12
Time: 26.67s