Customer API Test Cases

# TC01: Create Customer - Valid

* \*\*Steps:\*\*
* Send POST request to /customers with valid name, email, annualSpend, and lastPurchaseDate.
* Verify status code is 201.
* Verify response body contains email 'phule@example.com'.
* Verify calculated tier is 'Silver'.
* Store returned customerId for future tests.
* \*\*Expected Result:\*\*
* Customer is created with Silver tier and ID returned.

# TC02: Create Customer - Name Exists

* \*\*Steps:\*\*
* Send POST request to /customers with same name but different email.
* Verify status code is 201.
* Verify response body contains email 'phule2@example.com'.
* Verify calculated tier is 'Silver'.
* \*\*Expected Result:\*\*
* Customer is created and treated uniquely based on email.

# TC03: Create Customer - Email Exists

* \*\*Steps:\*\*
* Send POST request with existing email and different name.
* Verify status code is 201.
* Verify tier is 'Gold'.
* \*\*Expected Result:\*\*
* Customer is created with Gold tier based on spend.

# TC04: Create Customer - Missing Email

* \*\*Steps:\*\*
* Send POST request without email.
* Verify status code is 400.
* Verify error message indicates missing email.
* \*\*Expected Result:\*\*
* Validation error for missing email.

# TC05: Create Customer - Missing Name

* \*\*Steps:\*\*
* Send POST request without name.
* Verify status code is 400.
* Verify error message indicates missing name.
* \*\*Expected Result:\*\*
* Validation error for missing name.

# TC06: Create Customer - Invalid Email Format

* \*\*Steps:\*\*
* Send POST request with invalid email.
* Verify status code is 400.
* Verify error for invalid email format.
* \*\*Expected Result:\*\*
* Validation error for email format.

# TC07: Get Customer by ID - Valid

* \*\*Steps:\*\*
* Send GET request to /customers/{customerId}.
* Verify status 200 and response contains correct name and email.
* \*\*Expected Result:\*\*
* Customer is retrieved successfully.

# TC08: Get Customer by Name

* \*\*Steps:\*\*
* Send GET request to /customers?name=Phu Le.
* Verify 200 and correct customer info is returned.
* \*\*Expected Result:\*\*
* Customer is retrieved by name.

# TC09: Get Customer by Email

* \*\*Steps:\*\*
* Send GET request to /customers?email=phule@example.com.
* Verify 200 and customer info is returned.
* \*\*Expected Result:\*\*
* Customer is retrieved by email.

# TC10: Get Customer - Invalid Param

* \*\*Steps:\*\*
* Send GET with unsupported param.
* Verify 400 with message about missing name/email.
* \*\*Expected Result:\*\*
* Validation error due to missing supported param.

# TC11: Get Customer by ID - Not Found

* \*\*Steps:\*\*
* GET non-existent customerId.
* Expect 404 with 'Customer not found'.
* \*\*Expected Result:\*\*
* Correct error for not found customer.

# TC12: Update Customer by ID - Valid

* \*\*Steps:\*\*
* Send PUT to /customers/{customerId} with updated details.
* Check 200 and tier update.
* \*\*Expected Result:\*\*
* Customer updated successfully.

# TC13: Update Customer - Not Found

* \*\*Steps:\*\*
* PUT to unknown ID.
* Expect 404 error.
* \*\*Expected Result:\*\*
* Error for non-existent customer.

# TC14: Delete Customer - Valid

* \*\*Steps:\*\*
* Send DELETE to /customers/{customerId}.
* Verify 204 returned.
* \*\*Expected Result:\*\*
* Customer deleted.

# TC15: Delete Customer - Not Found

* \*\*Steps:\*\*
* DELETE unknown ID.
* Expect 404 with error message.
* \*\*Expected Result:\*\*
* Correct not found response.

# TC16: Tier Calculation - Silver

* \*\*Steps:\*\*
* Create customer with spend < 1000.
* Check tier is 'Silver'.
* \*\*Expected Result:\*\*
* Correct tier assigned.

# TC17: Tier Calculation - Gold

* \*\*Steps:\*\*
* Create customer with spend >= 1000 and < 10000 within 12 months.
* Check tier is 'Gold'.
* \*\*Expected Result:\*\*
* Correct tier assigned.

# TC18: Tier Calculation - Platinum

* \*\*Steps:\*\*
* Create customer with spend >= 10000 within 6 months.
* Check tier is 'Platinum'.
* \*\*Expected Result:\*\*
* Correct tier assigned.

# TC19: Tier Calculation Fallback - Gold instead of Platinum

* \*\*Steps:\*\*
* Create customer with spend >= 10000 but last purchase > 6 months.
* Expect tier is 'Gold'.
* \*\*Expected Result:\*\*
* Tier downgraded correctly.

# TC20: Tier Calculation Fallback - Silver instead of Gold

* \*\*Steps:\*\*
* Create customer with spend >= 1000 but last purchase > 12 months.
* Expect tier is 'Silver'.
* \*\*Expected Result:\*\*
* Tier downgraded correctly.