Budget Class

Identifying input values for use case-based testing

Input Element	Туре	Value Specs	Valid	Invalid	Exceptional Cases
budgetLimit	float	Must be from 1 to 999,999,999	Amount satisfies the value specs	Amount does not satisfy the value specs	0, negative amount or a very large number, decimal numbers, <black></black>
name	string	Must be a string of max char length of 50	Description satisfies the value specs	Description does not satisfy the value specs	<black></black>
category/tag	string	Must be unique for each budget	Tag satisfies value specs	Tag does not satisfy value specs	<black></black>

Test case generation for use case-based testing

Test Case	budgetLimit	name	category/tag	Expected Outcome
1	Valid	Valid	Valid	Shows success message
2	Invalid	Valid	Valid	Shows error message
3	Valid	Invalid	Valid	Shows error message
4	Valid	Valid	Invalid	Shows error message
5	Valid	Invalid	Invalid	
6	Invalid	Valid	Invalid	
7	Invalid	Invalid	Valid	
8	Invalid	Invalid	Invalid	
9	Exceptional	Valid	Valid	Shows error message
10	Exceptional	Invalid	Valid	
11	Exceptional	Valid	Invalid	

12	Exceptional	Invalid	Invalid	
13	Valid	Exceptional	Valid	Shows error message
14	Invalid	Exceptional	Valid	
15	Valid	Exceptional	Invalid	
16	Invalid	Exceptional	Invalid	
17	Valid	Valid	Exceptional	Show error message
18	Valid	Invalid	Exceptional	
19	Invalid	Valid	Exceptional	
20	Invalid	Invalid	Exceptional	

Use case-based tests

Test Case	budgetLimit	name	tag/category	Expected Outcome
1	120	Weekly Grocery Spending	Shopping	"Success", "Budget added successfully!"
2	-100	Weekly Grocery Spending	Shopping	'error': 'Budget should have a value greater than zero'
3	120	Groceries with many many many many many many many many	Shopping	'error': 'Name cannot exceed 50 characters'
4	120	Weekly Grocery Spending	Shopping (repeat)	'error': 'Budget with the tag already exists'
9.1	0	Weekly Grocery	Shopping	'error': 'Budget should

		Spending		have a value greater than zero'
9.2	99999999999999 999999999 99999999	Weekly Grocery Spending	Shopping	'error': 'Budget cannot exceed \$999,999,999'
9.3	<black></black>	Weekly Grocery Spending	Shopping	'error': 'Please fill in all fields correctly'
13	120	<black></black>	Shopping	'error': 'Please fill in all fields correctly'
8	120	Weekly Grocery Spending	<black></black>	'error': 'Please fill in all fields correctly'

Concrete test cases using unittest:
- Run python file test_app.py in DEBUG MODE