Personal Budget tracker

ENSE 375 Project

Equivalence class Testing

Similar to boundary value testing, we'll need to identify the valid and invalid input classes for each variable. Using equivalence class testing we'll divide these inputs into sets of valid and invalid classes where each set is expected to exhibit near similar behaviour. Then we'll create tests using representative values from each class to ensure the system correctly accepts or rejects them. The primary inputs for this test are:

1. **Type**: financial entry type
    a. valid class: income, expense
    b. invalid class: uppercase values ("INCOME"), other, numeric values (123).
2. **Category/Source**: pre-defined categories for expenses and income.
    a. valid class 1 (type == expense): food, rent, transport, entertainment, utilities, healthcare, other
    b. valid class 2 (type == income): income
    c. invalid class: empty string, uppercase values (e.g "CAR"), numeric values
3. **Amount**: financial value associated with the entry.
    a. valid class: values > 0 & <= 9999
    b. invalid class: values <= 0.

Equivalence class testing table:

Case	Type	Category/Source	Amount	Output
1	income	income	800.0	Valid Accepted
2	INCOME	" "	3000.0	Invalid Rejected
3	income	income	9000.0	Valid Accepted
4	expense	food	150.0	Valid Accepted
5	123	CAR	10000.0	Invalid Rejected
6	other	rent	300.0	Invalid type rejected
7	expense	transport	0.0	Valid amount
8	income	income	-50.0	Invalid amount
9	expense	98	500.0	Invalid category/source
10	expense	healthcare	700.0	Valid Amount
11	income	job	8000.0	Valid Accepted