

# Dorm Budget Assistant — Task Report

## Objective:

The purpose of this script is to help students plan and track their monthly budget. It guides the user through entering their name, budget amount, spending categories, and actual expenses. It then calculates the total spent, the remaining balance, and provides a warning if the student is approaching or exceeding their budget.

## Key Functionalities:

### User Interaction:

- The `greet_user` function displays a welcome message and collects the student's name.

### Input Validation:

- The `read_number_input` function ensures that the user provides a valid, non-negative numeric input.
- It handles empty or invalid entries gracefully.

### Dynamic Categories:

- The `get_categories` function allows users to either accept the default spending categories or add custom ones.
- Ensures the user doesn't input empty category names.

### Expense Collection:

- The `collect_expenses` function prompts the user for expenses in each category and stores them in a dictionary.

We are checking the data entered by the user and handling the unvalid inputs and asking the user to enter it again.

Finally when we do the calculation we are checking if the remaining is more than 20 % of the monthly budget we are showing the message

```
^ ^ Great job you are still within the budget
```

And if the remaining is between 0 and 20% of the monthly budget, we are showing the message

```
<<!>> WARNING: You are approaching within your budget limit
```

And if it's a negative number, we are showing the message

```
<<X>> You've exceeded your budget. Be cautious!
```