BudgetApp

Project Description
This program is designed to track budget activity. Goal achievement analysis and linear regression techniques are implemented to provide graphical spending trends as well as track goal progress and achievement status. An automatic weekly email is sent out including graphical spending and current goal data.

Main Design Blocks
- **DatabaseManager.py**
  Holds the Database class which handles basic database command execution and database connection management.
- **DataProcessor.py**
  Stores exported statement data into the Budget.db database and also runs linear regression and analytics on database expense entries. DataProcessor also determines achievability of current goals and alerts the user via email if any goals have been compromised by current spending trends.
- **Driver.py**
  The driver is the "main" of the program. It directs data where it needs to go and handles user commands like adding/removing/changing budget or goal information.
- **EmailGenerator.py**
  Automatically generates emails to be sent to the provided user's gmail account once a week. If a goal is compromised, an email will be sent immediately informing the user what actions can be taken.

Database Structure
Due to the sensitive nature of the content included in the database, the developer may use the DatabaseManager.py utilities to generate his/her own database which aligns with whatever export format is saved by his/her online banking application. The database originally designed with this application will not be shared on GitHub for the above mentioned reason.

More information on database building can be found in the README.md on the GitHub project page.