

## Dataanalyzer.py

```
from abc import ABC, abstractmethod
```

```
class AnalysisError(Exception):  
    pass
```

```
class DataAnalyzer(ABC):  
    @abstractmethod  
    def analyze(self, data):  
        pass
```

```
class TextDataAnalyzer(DataAnalyzer):  
    def analyze(self, data):  
        try:  
            if not isinstance(data, str):  
                raise TypeError("Data must be of type str for text analysis.")  
  
            word_count = len(data)  
            print(f"Text analysis complete. Word count: {word_count}")  
  
        except TypeError as e:  
            print(f"TypeError encountered: {e}")  
  
        except AnalysisError as e:  
            print(f"AnalysisError encountered: {e}")
```

```
class NumericDataAnalyzer(DataAnalyzer):  
    def __init__(self, funding_goal):  
        self.funding_goal = funding_goal  
  
    def analyze(self, data):  
        try:  
            if not isinstance(data, (int, float)):  
                raise TypeError("Data must be a number for numeric analysis.")  
  
            # Check funding goal  
            if data >= self.funding_goal:  
                print(f"Funding goal of {self.funding_goal} achieved!")  
            else:  
                print(f"Funding goal not met. Current funding: {data}")  
  
        except TypeError as e:  
            print(f"TypeError encountered: {e}")  
        except ValueError as e:  
            print(f"ValueError encountered: {e}")
```

```

except KeyError as e:
    print(f"KeyError encountered: {e}")
except AnalysisError as e:
    print(f"AnalysisError encountered: {e}")

# Test the implementation
def main():
    text_analyzer = TextDataAnalyzer()
    numeric_analyzer = NumericDataAnalyzer(funding_goal=1000)

    analyzers = [text_analyzer, numeric_analyzer]

    data_entries = ["This is a sample text for analysis.", 1500, "Another text entry.", 500,
1000]

    for analyzer in analyzers:
        for data in data_entries:
            print(f"\nAnalyzing with {analyzer.__class__.__name__}:")
            analyzer.analyze(data)

if __name__ == "__main__":
    main()

```

## creatorsupport.py

```

from abc import ABC, abstractmethod

class Supporter(ABC):
    @abstractmethod
    def support(self):
        pass

class Donor(Supporter):
    def __init__(self, name, amount):
        self.name = name
        self.amount = amount
    def support(self):
        print(f"{self.name} has donated {self.amount} $ towards the project")

class Subscriber(Supporter):
    def __init__(self, name, months):
        self.name = name
        self.months = months
    def support(self):
        print(f"{self.name} has subscribed for {self.months} months")

```

```
class Funder(Supporter):
    def __init__(self,name,funds):
        self.name = name
        self.funds = funds
    def support(self):
        print(f"{self.name} has funded the project with {self.funds} $")
```

```
_donor = Donor(name = "Sam",amount=40)
_subscriber = Subscriber(name = "Jeff",months=5)
_funder = Funder(name = "Charlie", funds=5000)
```

```
supporter_all = [_donor, _subscriber, _funder]
```

```
for _supporter in supporter_all:
    _supporter.support()
```