ANALYSIS DOCUMENT

**Phase 1**

**GROUP X**

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**Introduction**

* Briefly introduce the project and its purpose.
* Explain the motivation for choosing a personal finance application.

**Overview**

* Describe the core functionality of the app.
* Explain how users will interact with it through the console.

**Functional Requirements**

* + **Fast response time**
  + **Security (log on log off)**
  + **Store previous data**
  + **Multiple financial views (pulling reports)**
* List the key features, such as:
  + Adding income/expenses
  + Categorizing transactions
  + Generating reports
  + Budget tracking
  + Savings goals

**Non-Functional Requirements**

* + **Performance requirements:**
    - **App should load within 3 seconds for optimal UX**
    - **Transaction processing < 3 seconds**
  + **Security** 
    - **Data encryption aes-256, industry compliance**
  + **UX & UI**
    - **User friendly simple interface**
    - **Visually impaired support / deaf support via voice features**
  + **Scalability**
* Performance expectations
* Data persistence (e.g., file-based storage)
* Usability considerations

**System Models**

* Use case diagrams (e.g., adding an expense, generating a report)
* Sequence diagrams (e.g., how transactions are saved)
* Activity diagrams (e.g., monthly budgeting process)
* Class diagrams for object-oriented design
* **User Interaction Flow**
* Describe how users will interact with the console application.
* Provide example input/output scenarios.

**Conclusion**

* Summarize the expected outcome of the project.
* Discuss potential future improvements.

**Glossary & References**

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