WALLEE. PERSONAL FINANCE APP
PROGRESS EVALUATION REPORT #3

Wallee. Personal Finance App

1) Members :

- Emma Bahr : ebahr2022@my.fit.edu
- Matteo Caruso : mcaruso2023@my.fit.edu
- Joshua Cajuste : jcajuste2022@my.fit.edu
- Kyle Gibson : kgibson2022@my.fit.edu

2) Faculty Advisor : Dr. Siddhartha Bhattacharyya sbhattacharyya@fit.edu

3) Client :

- Doug Gibson - Small Business Owner
- Dr. Siddhartha Bhattacharyya - SWE/CSE Professor & Advisor

4) Task Matrix for Milestone 3 :

Task	Compl. %	Emma	Matteo	Joshua	Kyle	To do
Conduct end-to-end system testing	25%	25%	25%	25%	25%	
Refine AI chatbot with contextual learning	80%	0%	60%	20%	0%	
Implement user authentication and security improvements	60%	10%	25%	25%	0%	
Optimize performance and database queries	50%	25%	0%	25%	0%	
Develop app deployment pipeline (Android)	50%	0%	10%	40%	0%	
Conduct usability and accessibility testing	60%	10%	20%	15%	15%	

Prepare report and presentation materials	100%	30%	30%	15%	25%	
Finish implementing and testing user goals, custom budgeting and user profile	80%	0%	40%	0%	40%	

5) Discussion of each accomplished task (and obstacles) for Milestone 1 :

1. The team conducted extensive integration and functional testing across UI, API, database, and Plaid connections. Most major workflows operate successfully, but several minor bugs involving asynchronous updates and refresh states remain and are being addressed.

2. The chatbot now interrupts user financial patterns and generates more personalized insights. Context retention across multi-step conversations was improved. Remaining work includes expanding prompts related to budgeting strategies and goal-tracking.

3. Major progress was made on token encryption, secure session handling, and two-factor authentication setup. Some backend validation and token refresh logic require final reviewing before release.

4. Query execution times were significantly reduced through restructuring and indexing. API calls were optimized, resulting in reduced load-time for budget summaries and user dashboards. High-volume stress-testing is still pending.

5. Android build automation via CI/CD is functioning for internal testing. The team streamlined version control workflows. Additional pipeline checks and automated testing scripts are underway.

6. External testers provided feedback on navigation clarity, button contrast, and placement for budgeting tools. Several accessibility improvements such as text scaling, color contrast, and screen-reader compatibility are in progress.

7. Documentation has been started including updated architecture diagrams, screenshots, and system workflows. Slide layouts and draft presentation outlines are partially completed.

8. **Goal modification, custom budgeting logic, and expanded profile options are nearly complete. A remaining obstacle is synchronizing updated user data between screens without requiring forced refresh.**

6) Discussion : Contribution of each team member to Milestone 1 :

All team members have actively participated in every aspect of the process thus far. The comparison and selection of technical tools, as well as the choice of collaborative tools, were carried out collectively.

- **Emma :** Continued leading project planning through Jira, ensuring deadlines were met for Milestone 3. Focused heavily on database optimization, testing coordination, and documentation preparation. She also led end-to-end testing and contributed to CI/CD and database management.

- **Matteo :** expanded and polished UI/UX elements, improving consistency and accessibility. Led the contextual enhancements of the AI chatbot, including interface improvements and prompt-flow adjustments. Assisted with user testing rounds.

- **Joshua :** focused on backend enhancements, including authentication security upgrades, token handling, and Plaid data stability. Improved performance across API interactions and contributed to the deployment pipeline.

- **Kyle :** Developed and refined front-end components including the updated goal system and budgeting UI. participated in usability testing, debugging UI inconsistencies, and integrating backend data with new interface structures.

7) Plan for the next Milestone :

Task	Emma	Matteo	Joshua	Kyle
Ensure integrity and security of user back and financial information	33%	0%	33%	33%
Design and implement advanced menus	10%	70%	10%	10%
Implement and test budget categories with notifications	25%	25%	25%	25%
Implement and test AI-driven financial insights and proactive alerts	20%	30%	30%	20%
Implement and test visualizations (tables and graphs comparing budget vs. actual)	20%	40%	20%	20%
Improve paycheck-based recalculations and overspending adjustments	33%	0%	33%	33%
Improve AI chatbot responses	25%	25%	25%	25%
Refine security, encryption, and overall menu design for better usability	30%	10%	30%	30%

8) Discussion of each planned task for Milestone 3 :

- **Ensure integrity and security of user bank and financial information :** While Plaid and Supabase already properly secures users financial information we will still be adding extra security features of our own in order to protect the users account which include encrypting information used for the apis and the information associated with it
- **Design and implement advanced menus :** We need to optimize the user interface for maximum intuitiveness while strictly adhering to the application's professional tone. Furthermore, please focus on the high-fidelity details and visual polish required to elevate the product from a functional prototype to a

commercial-grade release.

- **Implement and test budget categories with notifications :** We currently have notifications implemented into the app they do pertain to any relevant information within the app. We plan to setup up alerts that pertain to users budgets

- **Implement and test AI-driven financial insights and proactive alerts :** We aim to transcend the limitations of a standard chatbot by integrating a privacy-first analytical engine. By utilizing proprietary algorithms—such as the logic driving the 'Wallee Score'—the system transforms raw financial data into normalized performance indicators (e.g., a 1–10 scale). The AI interacts solely with these abstracted metrics, never accessing sensitive raw figures. This architecture guarantees user data privacy while enabling the delivery of highly specific, actionable recommendations.

- **Implement and test visualizations (tables and graphs comparing budget vs. actual) :** We require the development of robust, proprietary algorithms designed to quantify user performance into a composite metric (e.g., the 'Wallee Score'). This engine must synthesize data from saving rates, goal completion, and spending behaviors to generate actionable feedback and dynamic data visualizations that accurately reflect the user's real-time financial health.

- **Improve paycheck-based recalculations and overspending adjustments :** We need to refine the financial logic to ensure that all paycheck-driven recalculations occur accurately and without delay, maintaining the system's reliability under real-world budgeting conditions. Additionally, please enhance the overspending adjustment workflows so they respond intelligently to user behavior, providing corrective guidance while preserving a polished, professional experience. This level of precision is essential to elevate the feature from a functional mechanism to a fully trustworthy financial management tool.

- **Improve AI chatbot responses :** We aim to enhance our AI conversational interface by grounding it in proven financial methodologies and regulatory standards. The objective is to move beyond generic responses to deliver hyper-personalized, scenario-based advice. By creating a secure and educational environment, the AI will actively facilitate financial literacy and accelerate user goal achievement through intelligent, context-aware guidance.

- **Refine security, encryption, and overall menu design for better usability :**

9) Date(s) of meeting(s) with Client during Milestone 1 :
- **Meeting 1: November 8, 2025**

10) Client feedback on the current milestone
- Mr. Gibson : Application features are satisfactory
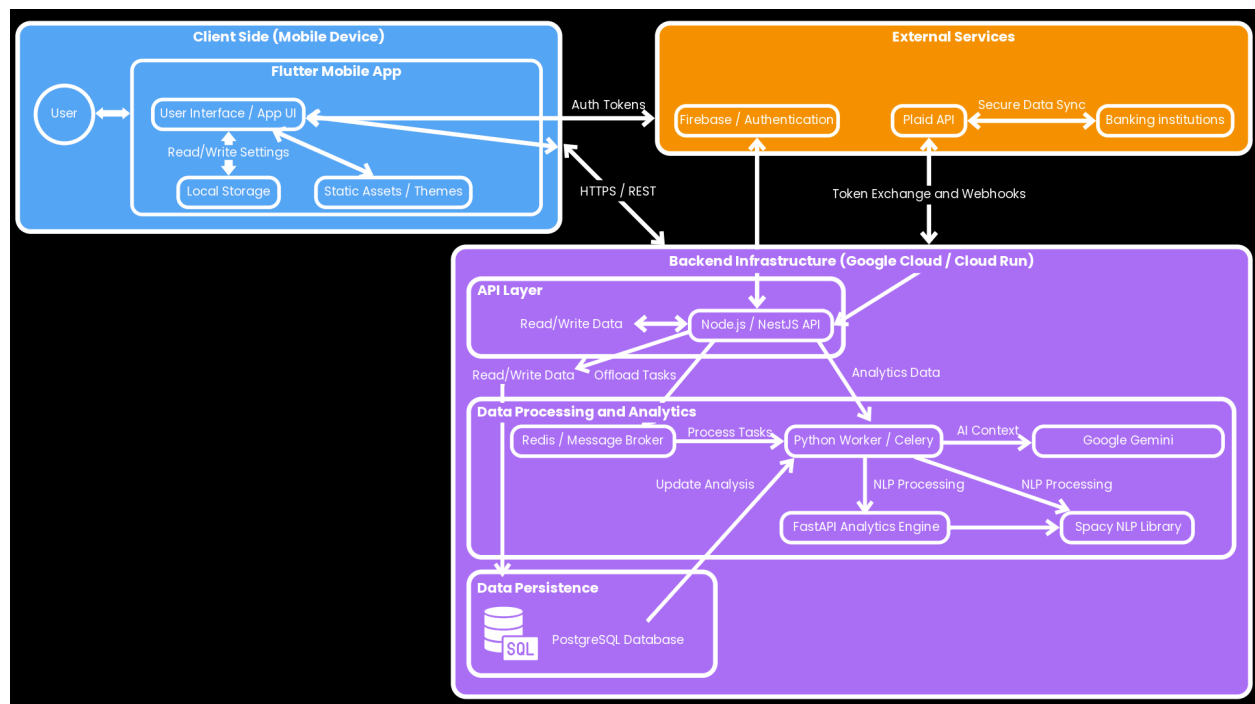- Dr. Siddhartha Bhattacharyya : see Faculty Advisor Feedback below.

11) Date(s) of meeting(s) with Faculty Advisor during Milestone 1 :
- **Meeting 1: November 10, 2025**

12) Faculty Advisor feedback on each task for Milestone 2 :

- **Dr. Bhattacharyya would like to see use cases, use case diagrams, and a system diagram for the app's features, the system diagram is shown below and the use case document is linked below as well.**

Faculty Advisor Signature: _ Date: _ _ _ _ _ _ _ _ _ _ _

[Wallee Use Case Document](#)

13) Evaluation by Faculty Advisor

- **Faculty Advisor :** detach and return this page to Dr. Chan (HC 209) or email the scores to pkc@cs.fit.edu.
- **Score (0-10) for each member :** circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10).

Emma	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Matteo	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Joshua	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Kyle	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Faculty Advisor Signature: _____   **Date:** _____