FlowTrack: Employee Traffic Monitoring System

Meeting Name	Business Meeting
Date	September 12th
Time/Location	5:00PM - 8:00PM; via Zoom
Purpose	Reporting current progress on mobile application development; discuss and point out the challenge and problems meet in development; discuss and check project management;
Expected Outcomes	The business team understand technical team's current progress and plan; The technical team understand business team's purpose and requirements; The technical team improves their project management and development under the business team's suggestion and communication.
Invitees ☑ present ☐ absent	Sponsor - Shahrukh Irani ☑ Member 1 - Yiwen Fan ☑ Member 2 - Changan Du ☑ Member 3 - Robert Zendarski ☑ Member 4 - Jackie Dong ☑

Agenda

1. Progress Report

    a. The technical team presents all location tracking methods tested in the past week, including Wi-Fi RTT (though limited by device support) and the Fused Location Provider technique, highlighting their respective advantages and disadvantages.
    b. Technical team presents current mobile app development status; present current demo.
    c. Share initial test results using the Fused Location Provider technique and evaluate its potential for accurate data collection.

2. Challenges and Issues

    a. Discuss technical difficulties encountered; determine the target accuracy/resolution of GPS data we are going to collect and process.
    b. Determine the target accuracy and resolution of location data required for meaningful analysis. Current best accuracy is around 5 meters, which is sufficient for general positioning but not enough for 3D vertical differentiation (e.g., distinguishing movement between different floors).
    c. Decide whether machine learning should be used in the project, and if so, define how it will be applied to data collection and analysis.
    d. Equipment and Constraints: The team currently has access to only one Android device for testing, and this device does not support Wi-Fi RTT, which limits the ability to experiment with higher-precision indoor positioning methods.

3. Project Management Review

   a. The team will review progress on last week's tasks and check alignment with the upcoming key deliverables due on September 24th — Project Charter (Final/Approved), Project Abstract, Context Diagram, and Lean Canvas. Discussion will focus on each member's contributions, current status, and any adjustments needed to ensure these submissions are completed on time and consistent with sponsor and manager expectations.

   b. Adjust workflow based on sponsor/manager feedback and set the next's business meeting time.

4. Next Steps

   a. Assign tasks for the upcoming week

   b. Test and confirm our final solution/technic to collect and process location data

Roles and Responsibilities

Name	Role	Responsibility
Shahrukh Irani	FlowTrack Project Sponsor	Approve product requirements, quality, and completeness
Dauntrica Woods	Flowtrack Project Manager	Overall project controls and quality assurance
Changan Du	Flowtrack Project Developer	research and test different techs used on collecting precise GPS location on mobile application development; organize and manage project development; communicate and report to business team.
Yiwen Fan	Flowtrack Project Developer	research on different techs to find out our final solution; look up similar cases on GitHub and share them with teammates; communicate with teammates and keep up with their progress and updates.
Robert Zendarski	Flowtrack Project Developer	Research and testing of FLP as well as exploring other options for location gathering (QGIS, specifically). Exploring options for facility mapping.

Jackie Dong	Flowtrack Project Developer	research different APIs for potential GPS tracking capabilities. provide sample code that could be used for testing.