TO: Randy R. Whittell, Lead Database Designer

FROM: Josiah Scott Ferguson, Project Manager

DATE: September 2, 2022

SUBJECT: GoFlyer Database Changes Needed

Summary

GoFlyer Inc. has set updated requirements for the GoFlyer website project in a client-team meeting today; these new requirements necessitate a redesign of the project's backend database. You will be responsible for redesigning the database, and working with the rest of the database design team to produce an optimized model by Wednesday morning (Sep. 7th). I will provide you with a detailed list of the new requirements tomorrow morning.

You will need to attend a team meeting in Room 141 on Monday at 11:00AM to discuss the progress on the redesign. Please bring your EER diagrams and logical models with you.

Relevant Requirement Changes

The database will need to account for a modular MFA/2FA (multi-factor/two-factor authentication) route of authentication. One-Time Passwords (OTPs) will be eight (8) digits long, and will need to be indexed routinely in order to ensure fast access to them.

Custom analytics data will need to be stored frequently, and will be tied back to the system user. This data will contain numeric, fixed-length attributes. Analytics data revision history will need to be maintained, and automatically backed up to tapes on a weekly basis.

A highly-optimized 'product recommendation' catalog will need to be implemented into the database as well. The in-progress recommendation system will group recommendations based on collected niche data, user view/order history, and user 'favorites', and will be stored in this highly-optimized catalog in order reduce load on the product servers.

I will provide you with a detailed list of the new requirements tomorrow morning. If you have any questions, please contact me either by email (josiah.ferguson338@topper.wku.edu) or phone (270-502-2604), or just swing by my office.