New Email Product Demo

What's New

- **Dedicated PostgreSQL Database:** A separate PostgresDB has been created.
    - Tables includes EmailRequest, EmailTemplate,EmailQueue & SchedulerAudit
- **API Payload Restructuring:** Payloads have been redesigned to manage data efficiently without the need for external database calls.
- **Enhanced Low-Level Design:** The LLD has been simplified and improved by following SOLID principles.
    - Means its easier to add new changes
    - implementing new email is now simplified
    - no more multiple file changes for a small feature in majority of cases
- **Liquibase Integration:** SQL changes are now being tracked using Liquibase.
    - no more manual storage and update of sql queries
- **Code Coverage Monitoring:** Jacoco has been integrated to monitor code coverage
    - currently we've 50% code coverage
    - aiming to maximise it as much as possible with initial target to 70%
- **Built-in Scheduler Monitoring:** The system Will includes monitoring by design.
    - Meaning Every Scheduler trigger will generate and send relavent email to support or assigned team member
    - no need manually creating creating support email trigger

What's Completed

- **API-Based Email Services:**
    - *Subscription-Based Emails:* Features include sending welcome emails as well as notifications for resume, pause, skip, cancel, change frequency, and addOnInc.

- *Child Order-Based Emails:* Includes notifications for contract pause confirmations, pre-authorization, pre-ship, pre-ship pull-forward, and order processing failures.

What's Pending

- **Bulk Email Features:** Bulk email functionalities, such as FST warnings and confirmations, are still in progress.
- **Scheduler Functions:** Pending tasks include schedulers for credit card expiration alerts, out-of-stock notifications, retry mechanisms, and data purging.

What's Next

- **Ongoing LLD Optimization:** Further refinement of the low-level design to ensure simplicity, scalability, and long-term maintainability.
- **Continued Monitoring:** The commitment to a "monitoring by design" approach will be Continued
- **Code Coverage:** We'll continue to improve the code coverage