**David Greene 2024 Mid-Year assessment**

**Significant Contributions and Key Responsibilities:**

Over the past six months, I have made significant contributions to our team at The Hartford, particularly in billing management. I have served as the primary contact for the billing management team, handling a variety of ad hoc requests and daily activities. This includes:

* **Monitoring**: Vigilant oversight of our systems and processes, ensuring smooth operations, and identifying potential issues before they escalate.
* **Collaboration with Offshore Teams**: Effective coordination with our offshore partners in daily working sessions, fostering a collaborative environment and ensuring all tasks are completed in a timely manner.
* **Recoveries and Debug Testing**: Instrumental in managing recoveries and conducting debug testing, which has helped maintain the integrity of our systems and data.
* **RCA Analysis**: Conducted Root Cause Analysis to identify the underlying causes of problems or incidents, enabling us to implement effective solutions and prevent future issues.
* **Ad Hoc Data Fixes**: Addressed various data-related issues, ensuring the accuracy and consistency of our data.
* **Batch Job Monitoring and Exception Resolution**: Monitored afternoon batch jobs and handled any exceptions that arose, ensuring that all processes ran smoothly and without interruption.

**Reliability Engineering (RE) Squad:**

In addition to my responsibilities in billing management, I have also been an integral member of the newly formed Reliability Engineering (RE) squad. This team is at the forefront of ensuring the reliability and robustness of our systems, and I am proud to contribute to its mission.

As a member of the RE squad, I have been actively involved in the development and execution of several user stories. These stories have been instrumental in driving improvements in system reliability and performance. Here are some highlights of my contributions:

* **User Story Development**: Collaborated with team members to develop user stories that accurately capture the requirements and objectives of our reliability engineering initiatives. This has involved detailed discussions with stakeholders, careful analysis of system needs, and creative problem-solving to devise effective solutions.
* **User Story Execution**: Once the user stories have been developed, I have taken a hands-on role in their execution. This has involved coding, testing, debugging, and deploying solutions. I have also been responsible for monitoring the performance of these solutions and making necessary adjustments to ensure optimal results.
* **Collaboration and Communication**: Throughout the process, I have worked closely with other members of the RE squad, fostering a collaborative environment. I have also maintained open lines of communication with stakeholders, providing regular updates on our progress and addressing any questions or concerns they may have.
* **Cloud Work**: Engaged in reliability engineering and cloud work, including upgrades to our ECS Cluster and auto-scaling capabilities. This has enhanced the performance and reliability of our systems.
* **Continuous Learning and Improvement**: Being part of the RE squad has provided me with numerous opportunities for learning and growth. I have continuously sought to expand my knowledge and skills, and I have embraced the iterative nature of our work, always looking for ways to improve our solutions and processes.

**Technical Skills and Professional Development:**

I have leveraged my technical skills to create automation scripts, including a Python script to scan logs for job billing start and end times. This has increased efficiency and reduced the potential for human error. I have also assisted the development team with lower environment testing, query creation, and research, providing valuable support and contributing to our team’s overall success.

As the point person in Billing for all day-to-day activities, I have enabled my colleague Carlos to focus on more senior tasks, demonstrating my ability to manage responsibilities and contribute to the team’s strategic goals.

In terms of professional development, I have completed training in AWS Developer Associate, Splunk Administration, and Dynatrace over the past six months. These courses have expanded my skill set and equipped me with the knowledge to contribute even more effectively to our team’s objectives.

**Conclusion:**

Overall, I am proud of the progress I have made and the contributions I have made to our team. I look forward to continuing to grow and make a positive impact in the coming months.

## BillingIntegrityMonitor.py

- \*\*Purpose\*\*: Automates critical tasks related to billing data integrity.

- \*\*Process\*\*:

1. Sets up essential variables, including dates and directories for log files and output data.

2. Attempts to download logs from a specified source using the `downloadLogsfromAFS()` function.

3. Ensures the existence of the output directory; creates it if needed.

4. Filters log files based on the current date and a specific extension ('DirectBillMonitoring.log').

5. Processes the data, cleans it by removing non-printable characters, and extracts crucial information (e.g., inconsistency types, account IDs).

6. Sends an email containing the processed log data as an attachment, with email details (subject, body, recipients) defined within the script.

- \*\*Overall Impact\*\*: Streamlines log data handling, enhances billing accuracy, and identifies discrepancies.

## timeFinder2.py

- \*\*Purpose\*\*: Utility for monitoring and analyzing log data.

- \*\*Process\*\*:

1. Scans log files within a specified date range.

2. Downloads logs using the `azcopy` command.

3. Processes logs and extracts relevant timestamps.

4. Generates a bar chart displaying job durations.

5. Presents log times in a user-friendly interface.