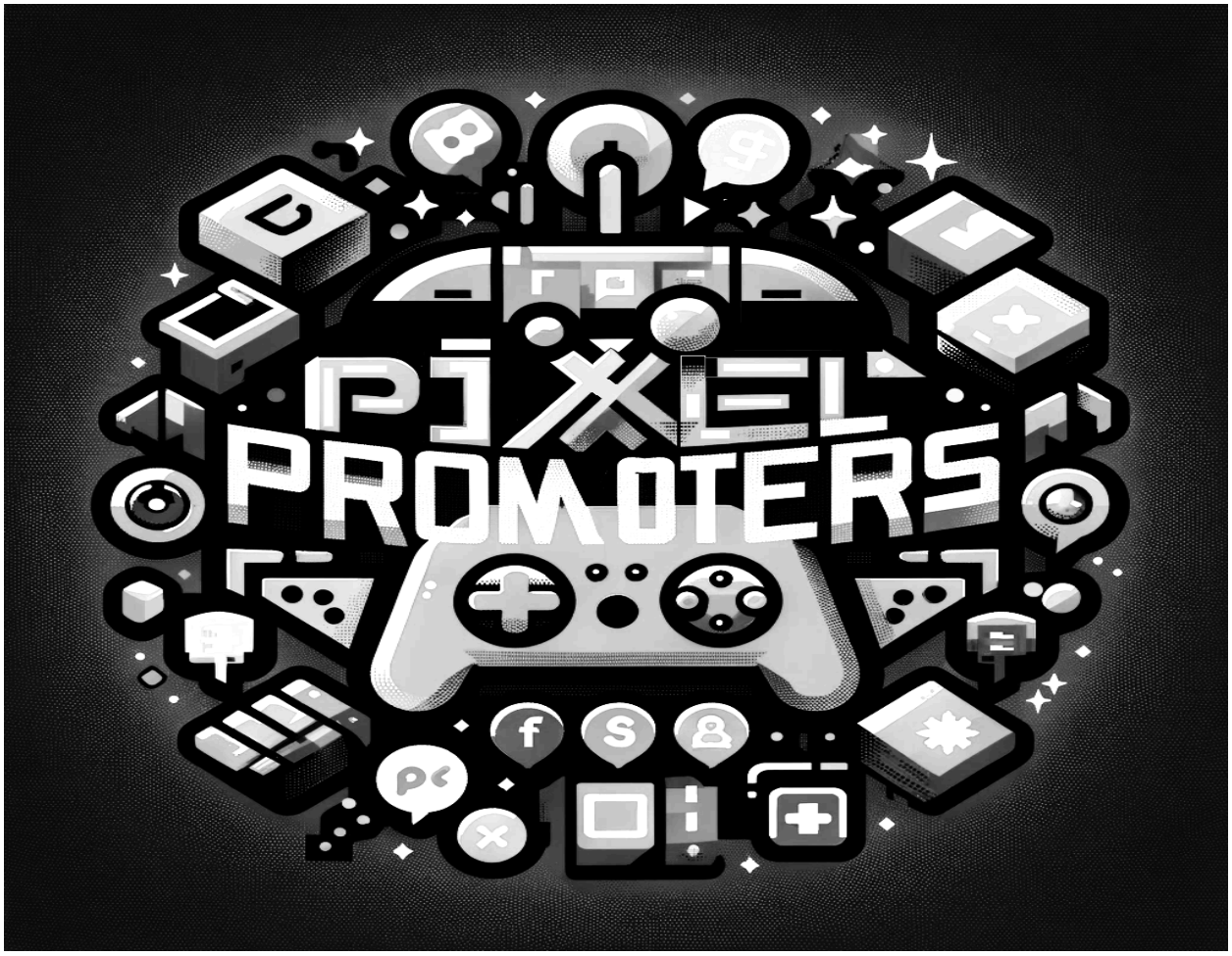

CanCodeCommunities SQL/ETL

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Introduction

"Pixel Promoters" is a new social media company that specializes in promoting promising indie games. They test games for client developers using a rubric that accepts quality games, and they use social media strategies to promote these games.

Overview

The purpose of using a database is to organize and manage data related to employees, departments, clients, campaigns, and social media platforms. The programs used were SQL Server Management Studio 19, Talend Open Studio for Data Integration 8.0.1, and Microsoft Power BI (for visualization of the Social Media data) to create a starting database package for this company. This document serves to describe each element in layperson language for someone who might be unfamiliar with SQL's abilities to understand the project.

Description of Key Tables

Employee Table

The employee table stores employee IDs, names, department IDs, job roles, salaries, hiring dates, and the status of each employee. For its connection to the Department Table, it will send employee ID to the Department Table to match up the manager ID. As new departments are created, the Employee Table will receive updates on department IDs from the Department Table.

Department Table

This table categorizes department information and employees into different departments. As new departments are created, the Department Table will send department IDs to the department ID section of the Employee Table. It will receive any needed manager ID numbers from the Employee Table's employee ID column.

Client and Campaign Tables

The client and campaign tables are linked through the client ID. When a new campaign is created and a client is given an ID number in the Campaign Table, the program will update

the data for the Client Table. This helps in managing information about the indie games and their promotional campaigns.

Social Media Table

For the beginning of this company's life, Social Media Table will have a unique unlinked table while the company gathers data. Eventually campaign and client IDs should be attached to show historical data for projects that follow . This table will track each PlatformID, PlatformName, and Characteristics (or metrics) for each social media platform.

Functionality of the Code

I. Functions

One way to explain functions, specifically in SQL for a social media company, is that they are shortcuts for performing repetitive actions. Functions take inputs such as likes, comments, and shares, and can return results for your company like time spent on the platform or engagement rates.

II. Stored Procedures

Stored procedures in SQL statements created that are saved in the database. Stored procedures are designed to automate complex, multi-step tasks by running automatically at set times or in response to certain events. For instance, if you have a lot of SQL users with SA privileges and a configuration setting keeps changing, you can narrow down what is happening with this tool. That is just one of many ways someone could use a stored procedure; they handle intricate operations, take various inputs, and can return multiple values, streamlining data processing activities.

III. ETL Package

ETL stands for Extract, Transform, and Load. This is a process in which a user extracts data from multiple sources and transforms it for consistency and clarity, then the data is loaded into a central database or data warehouse. In the context of this social media company, this process would be vital for integrating campaign data from various social media platforms to generate detailed performance reports.