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README for Game Rental Management System

Project Overview

This project, the Game Rental Management System, is designed to allow a employee to easily keep track of game rentals, customer subscriptions, and game inventory to buy for a game rental business. It is created from a series of Python scripts and a Jupyter notebook which you can interact with and process various data sets, providing a comprehensive system for tasks involving customer interactions and game inventory.

Data Files

This programme includes several important data files:

Business Games Data (Business Games\_data.txt):

Contents: Records of games available for rental or purchase.

Columns: ID, Title, Platform, Genre, Purchase Price, Purchase Date.

Purpose: Used to manage the inventory of games.

Customer Rental Data (Customer Rental Data.txt):

Contents: Information about game rentals by customers.

Columns: Game Id, Rental Start Date, Rental End Date, Customer Id.

Purpose: Tracks which games are rented out, when, and by whom.

Customer Subscription Data (Customer Subscription Data.txt):

Contents: Details of customer subscriptions to the rental service.

Columns: CustomerID, SubscriptionType, StartDate, EndDate.

Purpose: Manages different types of customer subscriptions.

Python Scripts

Several Python scripts are used to interact with and process the data:

Database Management (database.py):

Functionality: This creates the database containing all our rental information and game information.

Game Rental Process (gameRent.py):

Functionality: This is responsible for renting out games to customers with valid subscriptions.

Game Return Process (gameReturn.py):

Functionality: This is responsible for returning games back to the rental system.

Game Search Utility (gameSearch.py):

Functionality: This provides a search interface to see which games are available on a certain platform.

Game Selection Interface (gameSelect.py):

Functionality: Assists in selecting games for rental or purchase.

Jupyter Notebook

The project uses a Jupyter notebook for the user interface:

Menu (Menu.ipynb):

Functionality: Provides an interactive menu for selecting different functionalities of the system, combining the various Python modules together.

Setup and Usage

To set up and use the system:

Ensure Python is installed on your system.

Run the Python scripts or Jupyter notebook as needed for different operations like renting games, returning games, managing inventory, etc.