

專案開發規則

Title, Member, Abstract (標題, 人員, 摘要)

Project requirements(對需求的了解)

Project schedule(時程規劃)

Project plan(整體規劃: 用到何種資源)

範例如下

專案代號:	27329d3afac51fbf2762428e12f2635d1137c549
專案命名:	python_hr_sheet2db
開發人員:	Ness_Huang
更新日期:	2024-09-12
專案摘要:	<p>Google Sheet (HR)</p> <ul style="list-style-type: none">HR 部門在 Google Sheet 上輸入或維護員工數據。 <p>Google Sheet (IT)</p> <ul style="list-style-type: none">IT 部門在 Google Sheet 上進行數據清理或更新，並確認數據準備好輸入數據庫。 <p>Python Script</p> <ul style="list-style-type: none">使用 Python 程式從 Google Sheet (IT) 抓取數據。Python 對數據進行處理與格式化，確保數據能正確插入 PostgreSQL。 <p>PostgreSQL Database</p> <ul style="list-style-type: none">Python 透過 SQL 查詢將處理好的數據插入 PostgreSQL 數據庫中，更新員工記錄。
釐清需求:	不處理資料源直接拋轉

時程規劃:

項目	功能	進度
1	拋轉至指定資料庫	完成
2	寫入AirFlow	尚未開始

整體規劃: 各類軟體與工具整理

項目	名稱	類型	重要資訊
1	PostgresSQL	虛擬主機(資料庫)	10.231.220.60 Port:5432 Database: etlv1 Username: postgres Password: 無
2	GitLab	虛擬主機(版控)	10.231.220.97 帳號: root 密碼: password@123456
3	XShell	管理工具(SSH)	GitLab
4	DBeaver	管理工具(DB)	PostgresSQL
5	Google sheet	資料來源	URL (HR) --> URL (IT)
6	Thonny	開發軟體(IDE)	Python

功能畫面

ID	Last Name	First Name	Middle Name	Formal Name	Department	Last Date
BB-HO	PAINTUN	MANLORE	O	PAINTUN,MANLORE O	PH-HR-DIV	PH-HR-DIV
BB-HO	CORDEO	JOHNE	I	CORDEO,JOHNE I	PH-FBA-DIV	PH-FBA-DIV
BB-HO	CHEN	MORRIS HARLAND	G	CHEN,MORRIS HARLAND G	PH-FBA-DIV	PH-FBA-DIV
BB-HO	BENARMA	TELA	E JR	BENARMA,TELA E JR	BB-HO	BB-HO
BB-HO	VILLANUEVA	VENER	P	VILLANUEVA,VENER P	PH-FBA-DIV	PH-FBA-DIV
BB-HO	MANALAY	DELA VERA	S	MANALAY,DELA VERA S	PH-HR-DIV	PH-HR-DIV
BB-HO	GODIN	ARISAL	P	GODIN,ARISAL P	PH-HR-DIV	PH-HR-DIV
BB-HO	DE GUZMAN	AREAL	S	DE GUZMAN,AREAL S	PH-HR-DIV	PH-HR-DIV
BB-HO	GOMEZ	HAZEL	O	GOMEZ,HAZEL O	PH-HR-DIV	PH-HR-DIV
BB-HO	CABRERO	LUY REYNOLDO	F	CABRERO,LUY REYNOLDO F	PH-HR-DIV	PH-HR-DIV
BB-HO	DELA CRUZ	MA ANNE JELLY ACE	J	DELA CRUZ,MA ANNE JELLY ACE	PH-HR-DIV	PH-HR-DIV
BB-HO	DE JESUS	FRANCIS A	E	DE JESUS,FRANCIS A	PH-FBA-DIV	PH-FBA-DIV
BB-HO	UNTO	VENERA	S	UNTO,VENERA S	PH-FBA-DIV	PH-FBA-DIV
BB-HO	SOLATORIO	ANDREA	A	SOLATORIO,ANDREA A	PH-HR-DIV	PH-HR-DIV
BB-HO	ESQUI	SABAY	P	ESQUI,SABAY P	PH-FBA-DIV	PH-FBA-DIV
BB-HO	CHEN	GAB A VERONICA	L	CHEN,GAB A VERONICA L	PH-HR-DIV	PH-HR-DIV
BB-HO	WEE	REZEL LYRA	A	WEE,REZEL LYRA A	PH-FBA-DIV	PH-FBA-DIV
BB-HO	LAGUNA	DESEREE	S	LAGUNA,DESEREE S	BB-HO ADM	BB-HO ADM
BB-HO	CENTENO	SHERYL	S	CENTENO,SHERYL S	BB-HO OP	BB-HO OP
BB-HO	SALVADOR	RENATO	O	SALVADOR,RENATO O	BB-HO OP	BB-HO OP
BB-HO	RIVERA	REYESHAZZAN	C	RIVERA,REYESHAZZAN C	BB-HO OP	BB-HO OP
BB-HO	GO	GO JERRY ARMANDO	C	GO,JERRY ARMANDO C	PMD	PMD
BB-HO	LEYCAND	HENRY	O	LEYCAND,HENRY O	BB-HO ADM	BB-HO ADM
BB-HO	REYES	MARION	O	REYES,MARION O	BB-HO ADM	BB-HO ADM

HR來源 Google sheet

```
Thorny - C:\Users\2019051401\Desktop\HR_v2\Merge_v2.py @ 117:1
Merge_v2.py
1 import psycopg2
2 import gspread
3 from oauth2client.service_account import ServiceAccountCredentials
4
5 # DB 資訊
6 my_serverIP = "10.231.220.60"
7 my_DBName = "etlvi"
8 my_login_userName = "postgres"
9 my_login_password = ""
10 my_port = "5432"
11
12 # Google Sheets API 資訊
13 my_spreadsheet_name = "引用-HR 10碼工號"
14 my_GoogleSheet_PageName = "工作表1"
15
16 # 設定 Google Sheets API 認證
17 scope = ["https://spreadsheets.google.com/feeds", "https://www.googleapis.com/auth/drive"]
18 creds = ServiceAccountCredentials.from_json_keyfile_name('cred.json', scope)
19 client = gspread.authorize(creds)
20
21 try:
22     # 打開 Google Sheets
23     spreadsheet = client.open(my_spreadsheet_name)
24     sheet = spreadsheet.worksheet(my_GoogleSheet_PageName)
25
26     # 取得所有資料
27     data = sheet.get_all_values()
28     if not data:
29         raise ValueError("Google Sheets 中沒有數據")
30
31     header = data[0] if len(data) > 0 else []
32
33 >>> 執行 Merge_v2.py
34 已刪除表格 employee_records_for_etlvi (如果存在)
35 表格 employee_records_for_etlvi 已成功創建
36 資料已成功上傳至 PostgreSQL 資料庫
37 >>>
```

自動化腳本

ID	Formal Name	Department	Cost Centre	Reporting date
1	PAINTUN,MANLORE O	PH-HR-DIV	PH-HR-DIV	2019-11-26
2	CORDEO,JOHNE I	PH-FBA-DIV	PH-FBA-DIV	2019-11-26
3	CHEN,MORRIS HARLAND G	PH-FBA-DIV	PH-FBA-DIV	2019-11-26
4	BENARMA,TELA E JR	BB-HO	BB-HO	2019-11-26
5	VILLANUEVA,VENER P	PH-FBA-DIV	PH-FBA-DIV	2019-11-26
6	MANALAY,DELA VERA S	PH-HR-DIV	PH-HR-DIV	2019-11-26
7	GODIN,ARISAL P	PH-HR-DIV	PH-HR-DIV	2019-11-26
8	DE GUZMAN,AREAL S	PH-HR-DIV	PH-HR-DIV	2019-11-26
9	GOMEZ,HAZEL O	PH-HR-DIV	PH-HR-DIV	2019-11-26
10	CABRERO,LUY REYNOLDO F	PH-HR-DIV	PH-HR-DIV	2019-11-26
11	DELA CRUZ,MA ANNE JELLY ACE	PH-HR-DIV	PH-HR-DIV	2019-11-26
12	DE JESUS,FRANCIS A	PH-FBA-DIV	PH-FBA-DIV	2019-11-26
13	UNTO,VENERA S	PH-FBA-DIV	PH-FBA-DIV	2019-11-26
14	SOLATORIO,ANDREA A	PH-HR-DIV	PH-HR-DIV	2019-11-26
15	ESQUI,SABAY P	PH-FBA-DIV	PH-FBA-DIV	2019-11-26
16	CHEN,GAB A VERONICA L	PH-HR-DIV	PH-HR-DIV	2019-11-26
17	WEE,REZEL LYRA A	PH-FBA-DIV	PH-FBA-DIV	2019-11-26
18	LAGUNA,DESEREE S	BB-HO ADM	BB-HO ADM	2019-11-26
19	CENTENO,SHERYL S	BB-HO OP	BB-HO OP	2019-11-26
20	SALVADOR,RENATO O	BB-HO OP	BB-HO OP	2019-11-26
21	RIVERA,REYESHAZZAN C	PMD	PMD	2019-11-26
22	GO,JERRY ARMANDO C	BB-HO ADM	BB-HO ADM	2019-11-26
23	LEYCAND,HENRY O	BB-HO ADM	BB-HO ADM	2019-11-26
24	REYES,MARION O	BB-HO ADM	BB-HO ADM	2019-11-26
25	TOLENTINO,MICHAEL JOHN D	BB-HO PUR	BB-HO PUR	2019-11-26
26	KARANGALAN,FRANCIS MAR	BB-HO PUR	BB-HO PUR	2019-11-26
27	CHEN,CELINE MARIE L	BB-HO TD	BB-HO TD	2019-11-26
28	RODRIGUEZ,RODRIGUE P	CMD	CMD	2019-11-26
29	BAUTISTA,JOSE MARIA	BB-HO PUR	BB-HO PUR	2019-11-26
30	BARRETO,MAZEEY NIKOLIN S	BB-HO NUR	BB-HO NUR	2019-11-26
31	REYES,MAE L	PH-FBA-DIV	PH-FBA-DIV	2019-11-26

DB 資料庫管理工具