

## Employee Details Database

### 1. Database Design

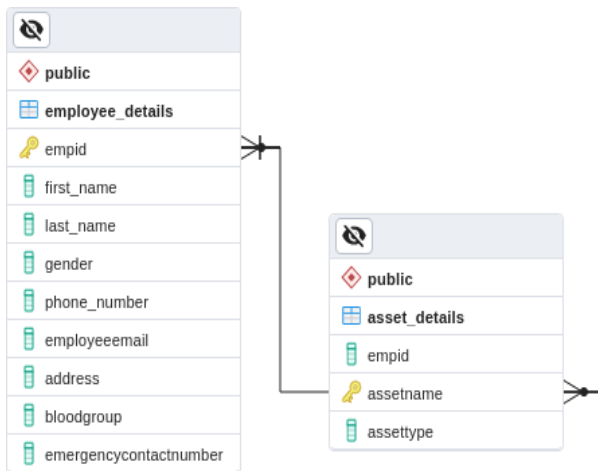
Two tables named `employee_details` and `asset_details` are created.

Relations are as follows :

**employee\_details**(empid, firstname, lastname, gender, phonenumber, employeeemail, address, bloodgroup, emergencycontactnumber)

**asset\_details**(empid, assetname, assettype)

### 2. Database Structure



### 3. Create Details

Employee details table creation

```
CREATE TABLE IF NOT EXISTS EMPLOYEE_Details(  
    EmpID VARCHAR(20) UNIQUE NOT NULL PRIMARY KEY,  
    FIRST_NAME CHAR(20) NOT NULL,  
    LAST_NAME CHAR(20),  
    GENDER CHAR(1),  
    PHONE_NUMBER NUMERIC,
```

```

EmployeeEmail domain_email,
Address VARCHAR(80),
BloodGroup VARCHAR(2),
EmergencyContactNumber NUMERIC
)

```

### Asset details table creation

```

CREATE TABLE IF NOT EXISTS ASSET_Details(
    EmpID VARCHAR(20) UNIQUE NOT NULL,
    AssetName text[] UNIQUE NOT NULL PRIMARY KEY,
    AssetType text[] UNIQUE NOT NULL,
    FOREIGN KEY(EmpID) REFERENCES EMPLOYEE_Details(EmpID)
)

```

### Mapping as per requirement

```

# execute the read statement
sql = """select * from (SELECT * FROM employee_details) as
emp_table inner join
(SELECT *,ARRAY_LENGTH(assetname,1) from asset_details)
as asset_table on emp_table.empid = asset_table.empid"""

cursor.execute(sql)
output = cursor.fetchall()

output_dictionary = {"EmployeeList":[]}
for each_output in output:
    rem_list = list(each_output)
    for i in range(3):
        del rem_list[-2]
    rem_list = [rem.strip() if isinstance(rem, str) else
rem for rem in rem_list]

    keys = list(each_output)[-2]
    values = list(each_output)[-3]

    result_dict = {}
    for k, v in zip(keys, values):
        if k in result_dict:
            result_dict[k].append(v)
        else:
            result_dict[k] = [v]
    #print(each_output)

```

```

        #print(rem_list+[result_dict])

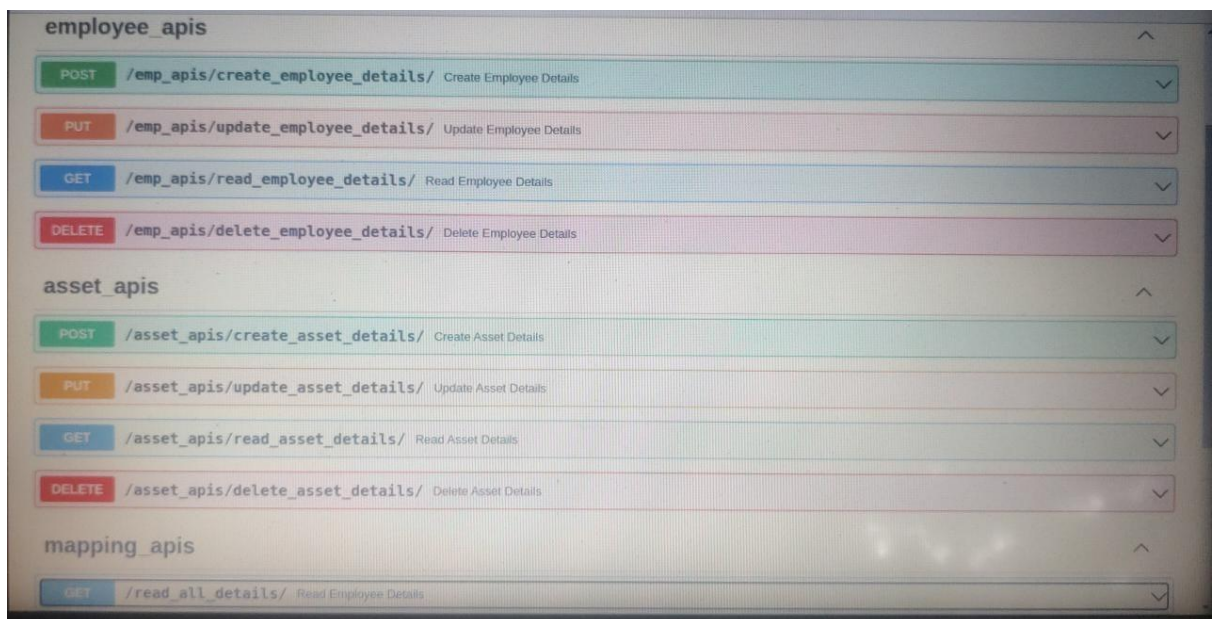
output_dictionary["EmployeeList"].append(dict(zip(column_names,
rem_list+[result_dict])))

#save output
file = open ("output.json","w")
file.write(str(output_dictionary))
file.close()

```

#### 4. Output:

##### Swagger UI



##### Json file for Employee Dashboard

```

{
  'EmployeeList': [
    {
      'empid': 'p34',
      'first_name': 'pushpahasa',
      'last_name': 'N S',
      'gender': 'M',
      'phone_number': Decimal('8861844185'),
      'employeeemail': 'nspushpahasa@gmail.com',
      'address': 'No 141 Mathru Krupa 3rd main',
      'bloodgroup': 'O+',
      'emergencycontactnumber': Decimal('9008622255'),
      'asset_counts': 5,
      'asset_names': {
        'ele': ['laptop'],
        'lux': ['car, AC', 'AC'],
        'furniture': ['table', 'chair']
      },
      'empid': 'p35',
      'first_name': 'Radha',
      'last_name': 'N S',
      'gender': 'F',
      'phone_number':

```

```
Decimal('9990022445'), 'employeeemail': 'nsp@yahoo.com', 'address': 'No  
121 SreeHari', 'bloodgroup': 'A', 'emergencycontactnumber':  
Decimal('9874560321'), 'asset_counts': 2, 'asset_names': {'ele':  
['laptop'], 'furniture': ['chair']}}}]}
```