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1. Develop the RESTful API to register/delete/update/get for an user using verbs such as:

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| freelancers = {}  # GET - Retrieve a freelancers  @app.route('/ freelancers /< freelancers\_id>', methods=['GET'])  def get\_ freelancers (freelancers \_id):  if freelancers \_id in freelancers:  return json (freelancers [freelancers \_id])  else:  return " Freelancers not found", 404  # POST - Register a new freelancer  @app.route('/ freelancers ', methods=['POST'])  def register\_ freelancers ():  data = request.json  freelancers \_id = len(freelancers) + 1  freelancers [str(freelancers \_id)] = data  return f" Freelancers { freelancers\_id} created", 201  # PUT - Update freelancers information  @app.route('/ freelancers /< freelancers \_id>', methods=['PUT'])  def update\_ freelancers (freelancers \_id):  if freelancers \_id in freelancers:  data = request.json  freelancers [freelancers \_id] = data  return f" Freelancers { freelancers \_id} updated"  else:  return " Freelancers not found", 404 |

1. The following are attributes for user model

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| import json  freelancers = [  {  "id": 1,  "username": "Bob",  "mail": "bob@gamil.com",  "phone number": "123-456-7890",  "skillsets": ["Web Development", "JavaScript", "Python"],  "hobby": "Gardening"  },  {  "id": 2,  "username": "Charlie",  "mail": " charlie@gamil.com ",  "phone number": "987-654-3210",  "skillsets": ["Mobile App Development", "Java", "Swift"],  "hobby": "Photography"  },  {  "id": 3,  "username": "alice",  "mail": "alice @gmail.com",  "phone number": "555-555-5555",  "skillsets": ["Data Analysis", "Python", "R"],  "hobby": "Hiking"  }  ] |

1. Connect to any of well-known RDBMS database to demonstrate data storage.

Connected to SQL server management studio, imported JSON file in sql.

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| 1. Connect to any of well-known RDBMS database (SQL server management studio). 2. import json data using OPENROWSET   SELECT \*  FROM OPENROWSET (Bulk 'C:\Users\TG Malaysia\freelencers.JSON', SINGLE\_CLOB) import   1. convert json output from variable into SQL server table   Declare @JSON varchar(max)  SELECT @JSON = BulkColumn  FROM OPENROWSET (Bulk 'C:\Users \TG Malaysia\freelencers.JSON', SINGLE\_CLOB) import  SELECT \*  FROM OPENJSON (@JSON)  4. import json file data into sql server table  Declare @JSON varchar(max)  SELECT @JSON = BulkColumn  FROM OPENROWSET (Bulk 'C:\Users \TG Malaysia\freelencers.JSON', SINGLE\_CLOB) import  SELECT \* into freelancers  FROM OPENJSON (@JSON)  WITH  (  [id] INT ,  [username] NVARCHAR(255),  [mail] NVARCHAR(255),  [phoneNumber] NVARCHAR(20),  [skillsets] NVARCHAR(MAX),  [hobby] NVARCHAR(255)  )  5. finally can select \*/add/delete/update data from table created |

A screenshot of a computer

Description automatically generated

1. Add data into table

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| INSERT INTO Freelancers (id, username, mail, phoneNumber, skillsets, hobby)  VALUES (david, 'david@example.com', '123-456-7890', 'Web Development’, 'Gardening'); |

1. Delete data

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| -- Delete a specific row based on a condition  DELETE FROM freelancer  WHERE id = '1';  -- Delete all rows from a table  DELETE FROM TableName; |

1. Update data

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| Update specific rows based on a condition  UPDATE Freelancer  SET id = '2', username = 'Charlie'  WHERE SomeColumn = 'SomeCondition'; |