

## תרגיל 2 – חלק א

בסיס נתונים:

Postgresql

הטבלאות:

Worker

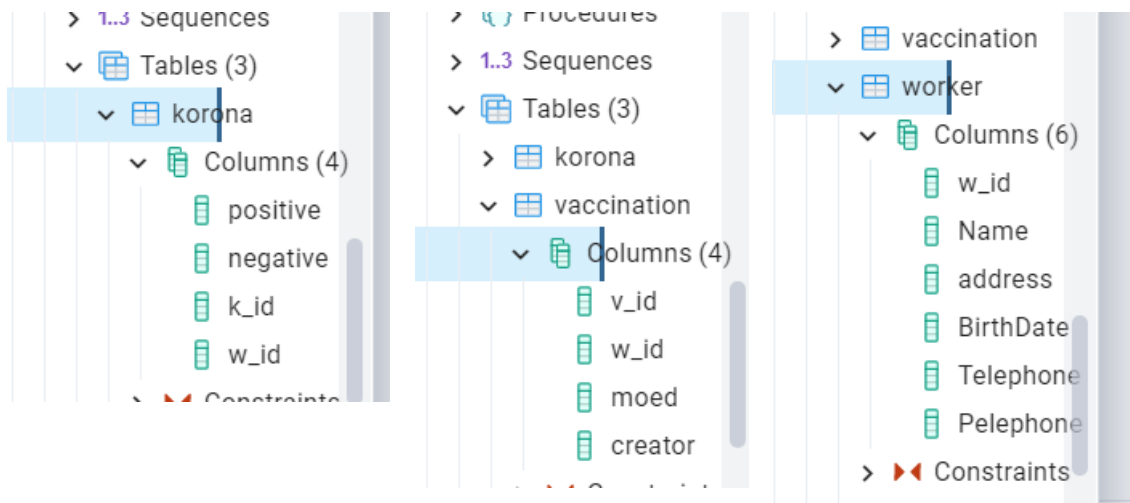
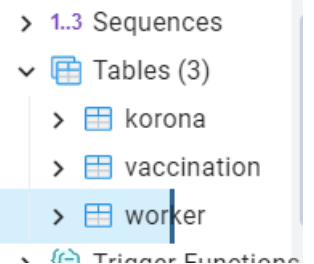
מבטא פרטים אישיים של אדם הרשום בקופת חולים

Korona

טבלה של חולי קורונה – תאכסן תאריכי חיוביות ושיליות , מספר מזהה וכן הפניה לטבלת הרשומים בקופת חולים.

Vaccination

חיסון – ניתן להכניס עד 4 חיסונים לאדם, בעלת מזהה , יוצר חיסון, ותאריך קבלה וכן הפניה לטבלת הרשומים בקופת חולים.



גישה למסד הנתונים – לוגיקה

סביבת עבודה –

Visual studio.net

שפה

C#

- API

שימוש ב

– ASP

The screenshot displays the APITrail Swagger UI interface. At the top, the title "APITrail" is shown with version "1.0" and "OAS3" badges. Below the title is the URL "https://localhost:7250/swagger/v1/swagger.json". The interface is organized into three main sections: "Koronas", "Vaccinations", and "Workers". Each section contains a list of API endpoints with their respective HTTP methods (GET or POST) and paths. The "Koronas" section has two endpoints: a GET endpoint for "/api/Koronas/{id}" and a POST endpoint for "/api/Koronas". The "Vaccinations" section has three endpoints: a POST endpoint for "/api/Vaccinations/api/Vaccination/DifferentialSync", a GET endpoint for "/api/Vaccinations/{id}", and a POST endpoint for "/api/Vaccinations". The "Workers" section has two endpoints: a GET endpoint for "/api/Workers/{id}" and a POST endpoint for "/api/Workers". Each endpoint entry is color-coded: blue for GET and green for POST. A vertical scrollbar is visible on the right side of the interface.

**APITrail** 1.0 OAS3  
https://localhost:7250/swagger/v1/swagger.json

### Koronas

- GET /api/Koronas/{id}
- POST /api/Koronas

### Vaccinations

- POST /api/Vaccinations/api/Vaccination/DifferentialSync
- GET /api/Vaccinations/{id}
- POST /api/Vaccinations

### Workers

- GET /api/Workers/{id}
- POST /api/Workers

דוגמת הרצה:

הרשמת מטופל לקופת החולים:

הכנסת הנתונים

## Workers

GET

/api/Workers/{id}

^

POST

/api/Workers

^

Parameters

Cancel

Reset

No parameters

Request body

application/json

```
{  "id": 325036333,  "w_Name": "string",  "address": "string",  "birth Date": "2023-05-11T18:02:00.228Z",  "telephone": 0,  "pelephone": 0}
```

Execute

Clear

הנתונים הוכנסו בהצלחה

Server response

Code	Details
201 <i>Undocumented</i>	<p>Response body</p> <pre>{   "id": 325036333,   "w_Name": "string",   "address": "string",   "birth_Date": "2023-05-11T18:02:00.228Z",   "telephone": 0,   "pelephone": 0 }</pre> <p>Response headers</p> <pre>content-type: application/json; charset=utf-8 date: Thu, 11 May 2023 18:03:03 GMT location: https://localhost:7250/api/Workers/325036333 server: Kestrel</pre>

Responses

Code	Description	Links
200		No links

ניסיון הכנסה נוסף בעל מס זהות זהה

קבלת שגיאה

Server response

Code	Details
500 <i>Undocumented</i>	<p>Error: response status is 500</p> <p>Response body</p> <pre>System.ArgumentException: An item with the same key has already been added. Key: 325036333    at System.Collections.Generic.Dictionary`2.TryInsert(TKey key, TValue value, InsertionBehavior behavior)    at Microsoft.EntityFrameworkCore.InMemory.Storage.Internal.InMemoryTable`1.Create(TUpdateEntry entry, IDiagnosticsLogger`1 updateLogger)</pre>

שליפת נתון קיים

## Workers

**GET** /api/Workers/{id}

**Parameters** Cancel

Name	Description
<b>id</b> * required	
integer(\$int32)	
(path)	

Execute

**Responses**

הצלחה עם קוד 200

**Request URL**

https://localhost:7250/api/Workers/325036333

**Server response**

Code	Details
200	<div><b>Response body</b></div> <div>{   "id": 325036333 }</div>

הכנסת מחלת קורונה לעובד קים

הצלחה קוד 201

Server response

Code	Details			
201 <i>Undocumented</i>	<p>Response body</p> <pre>{   "id": 325036333,   "w_id": 0,   "positive": "2023-05-11T18:13:30.952Z",   "negative": "2023-05-11T18:13:30.952Z" }</pre> <p>Response headers</p> <pre>content-type: application/json; charset=utf-8 date: Thu, 11 May 2023 18:13:39 GMT location: https://localhost:7250/api/Koronas/325036333 server: Kestrel</pre> <p>Responses</p> <table><thead><tr><th>Code</th><th>Description</th><th>Links</th></tr></thead><tbody></tbody></table>	Code	Description	Links
Code	Description	Links		

ניסיון הכנסה לעובד שאינו במאגר

Server response

Code	Details
400 <i>Undocumented</i>	<p>Error: response status is 400</p> <p>Response body</p> <pre>{   "type": "https://tools.ietf.org/html/rfc7231#section-6.5.1",   "title": "One or more validation errors occurred.",   "status": 400,   "traceId": "00-e5ed1f79fc57cb7b5270519f6b44036f-6452b7922d011eb9-00",   "errors": {     "korona": [       "The korona field is required."     ],     "\$.id": [       "The JSON value could not be converted to System.Int32. Path: \$.id   LineNumber: 1   BytePositionInLine: 20."     ]   } }</pre> <p>Response headers</p> <pre>content-type: application/problem+json; charset=utf-8 date: Thu, 11 May 2023 18:14:23 GMT server: Kestrel</pre>

כישלון

ניסיון הכנסת מחלקת קורונה נוספת לאותו עובד

שגיאה

server response

Code	Details
500	<p>Undocumented Error: response status is 500</p> <p>Response body</p> <pre>System.ArgumentException: An item with the same key has already been added. Key: 325036333    at System.Collections.Generic.Dictionary`2.TryInsert(TKey key, TValue value, InsertionBehavior behavior)    at Microsoft.EntityFrameworkCore.InMemory.Storage.Internal.InMemoryTable`1.Create(IUpdateEntry entry, IDiagnosticsLogger`1 updateLogger)    at Microsoft.EntityFrameworkCore.InMemory.Storage.Internal.InMemoryStore.ExecuteTransaction(IList`1 entries, IDiagnosticsLogger`1 updateLogger)    at Microsoft.EntityFrameworkCore.InMemory.Storage.Internal.InMemoryDatabase.SaveChangesAsync(IList`1 entries, CancellationToken cancellationToken)    at Microsoft.EntityFrameworkCore.ChangeTracking.Internal.StateManager.SaveChangesAsync(IList`1 entriesToSave, CancellationToken cancellationToken)    at Microsoft.EntityFrameworkCore.ChangeTracking.Internal.StateManager.SaveChangesAsync(StateManager stateManager, Boolean acceptAllChangesOnSuccess, CancellationToken cancellationToken)    at Microsoft.EntityFrameworkCore.DbContext.SaveChangesAsync(Boolean accep</pre>

כנל לגבי הכנסת חיסון

בניסיון הכנסה מעל ל 4 חיסונים לאותו אדם:

כישלון

Curl

```
curl -X 'POST' \
  'https://localhost:7250/api/Vaccinations' \
  -H 'accept: text/plain' \
  -H 'Content-Type: application/json' \
  -d '{
    "id": 4567,
    "w_Id": 0,
    "moed": "2023-05-11T18:18:14.254Z",
    "creator": "string"
  }'
```

Request URL

https://localhost:7250/api/Vaccinations

Server response

Code	Details
500	<p>Undocumented Error: response status is 500</p> <p>Response body</p> <pre>System.ArgumentException: An item with the same key has already been added. Key: 4567    at System.Collections.Generic.Dictionary`2.TryInsert(TKey key, TValue value, InsertionBehavior behavior)</pre>