

דוח פרויקט
מיני פרויקט בבסיסי נתונים
- שלב א' -

המערכת: מערכת לניהול ספריה
היחידה הנבחרת: ניהול אירועים בספריה



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מבוא

המערכת הכללית היא מערכת לניהול ספריה. היחידה בה אנו מתמקדות היא ניהול האירועים בספריה.

מטעם הספרייה מתארגנים אירועים שונים ופעילויות שונות, בתאריכים שונים, באולמות שונים הקיימים בספריה, ולקהלי יעד שונים.

המערכת שלנו שומרת מידע רלוונטי אודות האירועים (בעבר או בעתיד), האולמות, מנהלי האירועים, המפעילים והמשתתפים.

מטרת המערכת היא לאפשר ניהול וסנכרון נוח ומסודר בין הגורמים השונים, וכן לאפשר מעקב והסקת מסקנות על סמך נתוני עבר, על מנת לייעל את מדור הפעילויות של הספרייה.

נרצה לתשאל את המערכת שאלות כגון:

כל המידע אודות פעילות מסוימת (פרטי המיקום, המנהל, המשתתפים, מפעיל וכו')

באיזה אולם שביעות הרצון מההפעלות היא הטובה ביותר – על פי ציון המשוב שסיפקו המשתתפים.

מהו האירוע שגרף את הרווחים המקסימליים (נחשב לפי כמות המשתתפים, המחיר לכרטיס, ומחיר המפעיל)

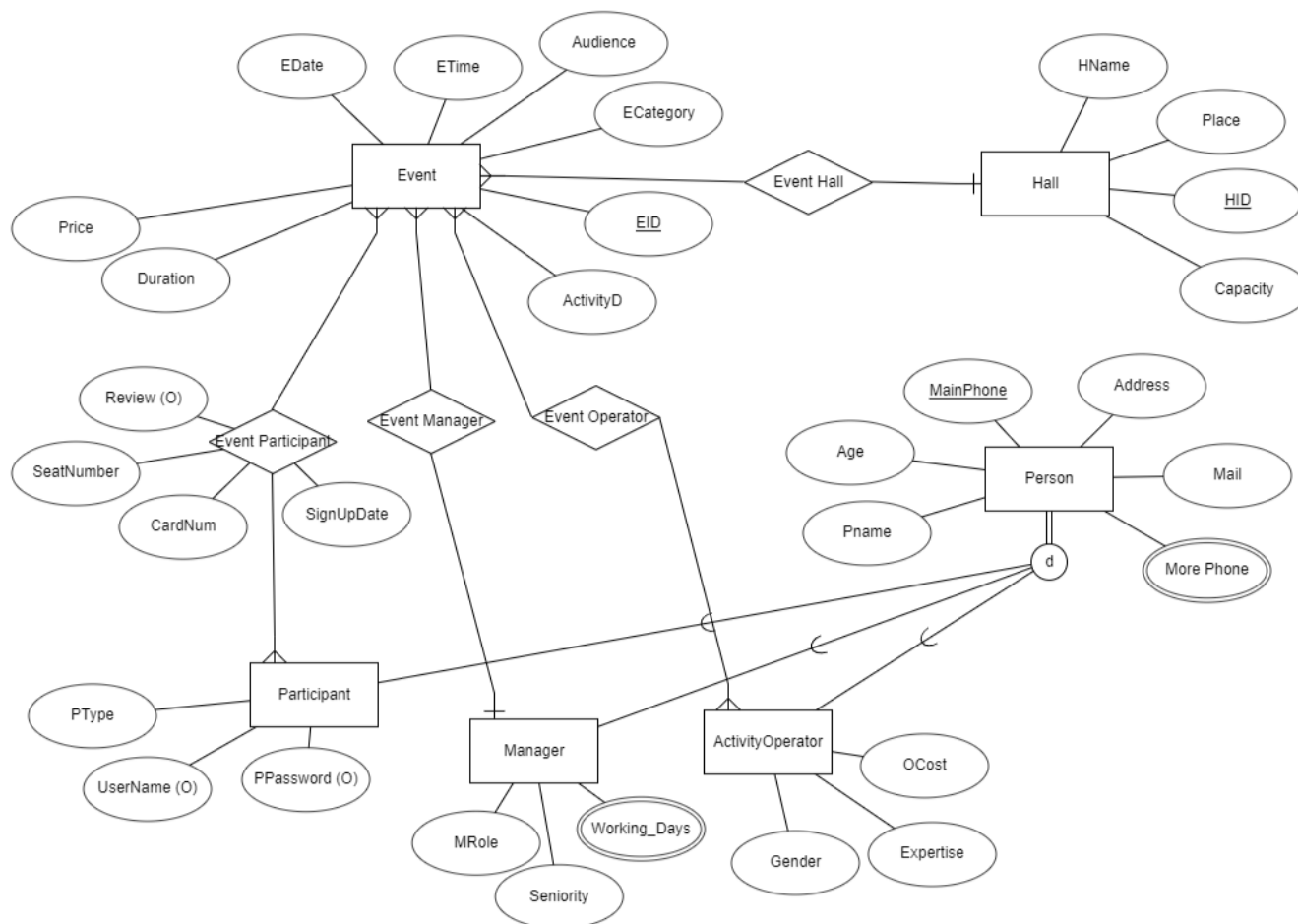
איזה סוג פעילות הוא המועדף בקרב ילדים מתחת לגיל 15 (נראה עבור איזה פעילות כמות הנרשמים מטווח גילאים זה היא הגבוהה ביותר)

מהו הגיל הממוצע של המשתתפים בהרצאות

חישוב הנחה עבור כל הנרשמים עד שבוע לפני יום האירוע

וכן הלאה...

תרשים ERD



נתייחס לכמה החלטות עיצוב שקיבלנו:

קשר "רבים לרבים" בין ישות מפעיל לישות אירוע: מאחר שיתכן שיוזמן יותר ממפעיל יחיד לאירוע מסוים, הקשר הוא כזה שמאפשר זאת.

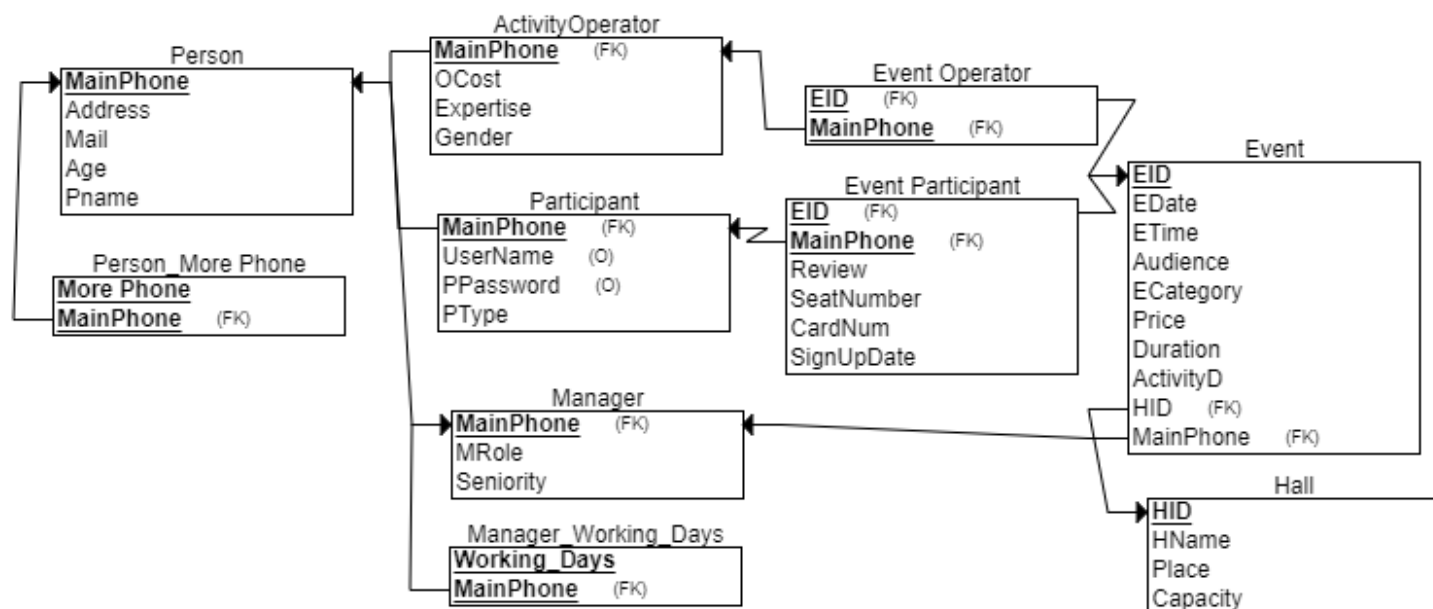
לעומת זאת: קשר "יחיד לרבים" בין ישות נהל לישות אירוע: בחרנו לאפשר שיבוץ של מנהל אחד בלבד לכל אירוע שיהיה האחראי הראשי, כדי לשמור על הגיון ועל סדר.

משתתף יכול להיות מסוג "מנוי" או "לא מנוי". עבור משתתף מנוי בלבד נשמרים שם המשתמש וסיסמא, ולכן תכונות אלו אופציונאליות בלבד.

עבור ישות מנהל ישנה תכונה ששומרת את הימים בשבוע בהם הוא עובד, משום שדבר זה תורם להסקת מסקנות שקשורות לניהול אירועים, ולשיבוץ תקין של מנהל ואירוע זה לזה.

מאחר ויש לנו שלוש ישויות (מפעיל, מנהל ומשתתף) שמייצגות אנשים, ארגנו את הקשרים בעזרת ירושה, כך שיש ישות "person" כללית, שלה תכונות הנוגעות לכל האנשים. וממנה יורשת כל ישות ספציפית יותר, ומכילה תכונות נוספות שרלוונטיות עבורה בלבד.

תרשים DSD



פיקודת CREATE TABLE

```

CREATE TABLE Hall
(
    HName varchar2(15) NOT NULL,
    Place varchar2(40) NOT NULL,
    HID INT NOT NULL,
    Capacity INT NOT NULL,
    PRIMARY KEY (HID)
);

CREATE TABLE Person
(
    Address varchar2(40) NOT NULL,
    Mail varchar2(30) NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    Age INT NOT NULL,
    Pname varchar2(30) NOT NULL,
    PRIMARY KEY (MainPhone)
);

CREATE TABLE Manager
(
    MRole varchar2(20) NOT NULL,
    Seniority INT NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (MainPhone),
    FOREIGN KEY (MainPhone) REFERENCES Person(MainPhone)
);

CREATE TABLE ActivityOperator
(
    OCost number(8,2) NOT NULL,
    Expertise varchar2(40) NOT NULL,
    Gender varchar2(15) NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (MainPhone),
    FOREIGN KEY (MainPhone) REFERENCES Person(MainPhone)
);

CREATE TABLE Participant
(
    UserName varchar2(40),
    PPassword INT,
    PType varchar2(30) NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (MainPhone),
    FOREIGN KEY (MainPhone) REFERENCES Person(MainPhone)
);

CREATE TABLE Person_More_Phone
(
    More_Phone varchar2(10) NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (More_Phone, MainPhone),
    FOREIGN KEY (MainPhone) REFERENCES Person(MainPhone)
);

```

```

CREATE TABLE Manager_Working_Days
(
    Working_Days varchar2(10) NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (Working_Days, MainPhone),
    FOREIGN KEY (MainPhone) REFERENCES Manager(MainPhone)
);

CREATE TABLE Event
(
    EDate date NOT NULL,
    ETime number(4,0) NOT NULL,
    Audience varchar2(30) NOT NULL,
    ECategory varchar2(40) NOT NULL,
    ActivityD varchar2(300) NOT NULL,
    Price NUMBER(6,2) NOT NULL,
    Duration INT NOT NULL,
    EID INT NOT NULL,
    HID INT NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (EID),
    FOREIGN KEY (HID) REFERENCES Hall(HID),
    FOREIGN KEY (MainPhone) REFERENCES Manager(MainPhone)
);

CREATE TABLE Event_Operator
(
    EID INT NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (EID, MainPhone),
    FOREIGN KEY (EID) REFERENCES Event(EID),
    FOREIGN KEY (MainPhone) REFERENCES ActivityOperator(MainPhone)
);

CREATE TABLE Event_Participant
(
    Review INT NOT NULL,
    SeatNumber INT NOT NULL,
    CardNum INT NOT NULL,
    SignUpDate date NOT NULL,
    EID INT NOT NULL,
    MainPhone varchar2(10) NOT NULL,
    PRIMARY KEY (EID, MainPhone),
    FOREIGN KEY (EID) REFERENCES Event(EID),
    FOREIGN KEY (MainPhone) REFERENCES Participant(MainPhone)
);

```

Desc

Columns of HALL

Name	Type	Nullable	Default	Comments
▶ HNAME	VARCHAR2(15)			
2 PLACE	VARCHAR2(40)			
3 HID	INTEGER			
4 CAPACITY	INTEGER			

Columns of PERSON

Name	Type	Nullable	Default	Comments
▶ ADDRESS	VARCHAR2(40)			
2 MAIL	VARCHAR2(30)			
3 MAINPHONE	VARCHAR2(10)			
4 AGE	INTEGER			
5 PNAME	VARCHAR2(30)			

Columns of ACTIVITYOPERATOR

Name	Type	Nullable	Default	Comments
▶ OCOST	NUMBER(8,2)			
2 EXPERTISE	VARCHAR2(40)			
3 GENDER	VARCHAR2(15)			
4 MAINPHONE	VARCHAR2(10)			

Columns of MANAGER

Name	Type	Nullable	Default	Comments
▶ MROLE	VARCHAR2(20)			
2 SENIORITY	INTEGER			
3 MAINPHONE	VARCHAR2(10)			

Columns of PARTICIPANT

Name	Type	Nullable	Default	Comments
▶ USERNAME	VARCHAR2(40)	Y		
2 PPASSWORD	INTEGER	Y		
3 PTYPE	VARCHAR2(30)			
4 MAINPHONE	VARCHAR2(10)			

Columns of PERSON_MORE_PHONE

Name	Type	Nullable	Default	Comments
▶ MORE_PHONE	VARCHAR2(10)			
2 MAINPHONE	VARCHAR2(10)			

Columns of MANAGER_WORKING_DAYS

Name	Type	Nullable	Default	Comments
▶ WORKING_DAYS	VARCHAR2(10)			
2 MAINPHONE	VARCHAR2(10)			

Columns of EVENT

Name	Type	Nullable	Default	Comments
▶ EDATE	DATE			
2 ETIME	NUMBER(4)			
3 AUDIENCE	VARCHAR2(30)			
4 ECATEGORY	VARCHAR2(40)			
5 ACTIVITYD	VARCHAR2(300)			
6 PRICE	NUMBER(6,2)			
7 DURATION	INTEGER			
8 EID	INTEGER			
9 HID	INTEGER			
10 MAINPHONE	VARCHAR2(10)			

Columns of EVENT_OPERATOR

Name	Type	Nullable	Default	Comments
▶ EID	INTEGER			
2 MAINPHONE	VARCHAR2(10)			

Columns of EVENT_PARTICIPANT

Name	Type	Nullable	Default	Comments
▶ REVIEW	INTEGER			
2 SEATNUMBER	INTEGER			
3 CARDNUM	INTEGER			
4 SIGNUPDATE	DATE			
5 EID	INTEGER			
6 MAINPHONE	VARCHAR2(10)			

הכנסת נתונים ע"י data generator

לדוגמא:

EVENT				
Owner	Table	Number of records		
SYSTEM	EVENT	420		
Name	Type	Size	Data	
EDATE	DATE		Random(1/1/2000, 1/1/2016)	
ETIME	NUMBER	4	list(1000, 1030, 1100, 1200, 1230, 1300, 1330, 1400, 1430, 1500, 1530, 1600, 1630, 1700, 1730, 1800,	
AUDIENCE	VARCHAR2	30	list('Children', 'Adults', 'Elderly', 'Youth', 'Children and youth')	
ECATEGORY	VARCHAR2	40	list('Lecture', 'workshop', 'performance', 'story', 'educational activity', 'play', 'conversation with an au	
ACTIVITYD	VARCHAR2	300	Components.Description	
PRICE	NUMBER	6,2	Random(10.00, 300.00)	
DURATION	NUMBER		Random(30, 360)	
EID	NUMBER		Sequence(1, [Inc])	
HID	NUMBER		List(select HID from HALL)	
MAINPHONE	VARCHAR2	10	List(select MAINPHONE from MANAGER)	

HALL				
Owner	Table	Number of records		
SYSTEM	HALL	450		
Name	Type	Size	Data	
HNAME	VARCHAR2	15	List('Iris', 'Tavor', 'Galilee', 'Hermon', 'Carmel', 'Negev', 'Sharon', 'Golan', 'Eilat', 'Sinai')	
PLACE	VARCHAR2	40	List('floor: 0 room: 0001', 'floor: 1 room: 1023', 'floor: 2 room: 2034', 'floor: 3 room: 3045', 'floor: 4 room: 4056', 'floor: 5	
HID	NUMBER		Sequence(1, [Inc], [WithinParent])	
CAPACITY	NUMBER		List(30,50,80,100,150,200,250,300,500)	

EVENT										
EDATE	ETIME	AUDIENCE	ECATEGORY	ACTIVITYD	PRICE	DURA	EID	HID	MAINPHONE	
04-05-2012	1630	Adults	exhibition	ADS USB2000 USB Turbo 2.0 pci (53.77	224	1	8	5550004	
17-04-2001	1330	Adults	performance	AMD XP 2000+ Box/with AMD Fa	218.51	52	2	5	5550008	
24-03-2010	1630	Elderly	story	AMD XP 2600+ Retail box. (with	201.20	134	3	2	5550004	
20-03-2007	1630	Youth	sports	GA-SINXP1394(GA-8SQ800 Ultra	152.14	107	4	2	5550008	
25-08-2013	1530	Children ar	story	AMD XP 2200+ & Gigabyte 7N40	147.54	65	5	6	5550001	
17-06-2001	1630	Elderly	film screening	Black Complete Computer System	190.68	110	6	6	5550001	
30-11-2000	1030	Adults	performance	Cable/DSL Broadband Router (w/	209.14	161	7	1	5550004	
16-01-2002	1200	Elderly	film screening	ATI Radeon 7000 32MB DDR PCI	265.19	343	8	4	5550001	
31-12-2012	1230	Elderly	sports	8 inch Neon blue lamp	36.09	201	9	3	5550003	
22-02-2014	1000	Elderly	exhibition	Combo AMD XP 2600+ CPU; Giga	82.78	317	10	6	5550008	
01-02-2014	1900	Children ar	exhibition	Maxtor External 80Gb Hard drive	287.55	96	11	7	5550006	
16-12-2000	1930	Children ar	exhibition	Intel Pentium4 2.0ghz & Gigabyte	66.50	345	12	6	5550001	
17-05-2000	1630	Youth	volunteering	14inch LCD MG-015A Xgen2 Mon	236.00	158	13	7	5550008	
28-07-2000	1300	Adults	exhibition	USB to Parallel Printer Cable.	269.12	360	14	4	5550008	
15-05-2007	1300	Children ar	exhibition	Biostar M7TDR P4 M/B Skt 423 (w	184.18	162	15	7	5550008	
16-10-2011	1500	Elderly	training	Intel Celeron 1.3Ghz & Biostar M6	175.97	303	16	2	5550006	
25-12-2011	1430	Elderly	story	TV Tuner card PCI (KWorld M878	265.58	207	17	6	5550003	
05-07-2004	1900	Elderly	educational activity	Intel Celeron 1.3GHz 256k S370 F	244.54	282	18	7	5550008	
03-08-2014	1030	Youth	exhibition	AMD XP 2000+ (OEM)	54.86	282	19	7	5550001	
24-04-2005	1200	Children ar	Lecture	AMD XP 1800+ & Biostar M7VKQ	80.72	134	20	4	5550003	
26-07-2006	1200	Adults	film screening	Intel Pentium4 3.0ghz & Asus P4C	127.18	207	21	2	5550003	
14-03-2011	1230	Elderly	sports	Sony 16X DVD-CDRom (OEM)	162.86	58	22	3	5550001	
30-06-2006	1800	Children	Lecture	AMD XP 1700+ & Gigabyte GA-7	199.23	212	23	5	5550001	
22-04-2015	1630	Elderly	performance	ADS Technologies Firewire Extern	151.69	295	24	7	5550001	
26-05-2007	2000	Adults	film screening	AMD XP 2100+ CPU (oem)(AXDA	236.29	338	25	6	5550003	
23-06-2008	1500	Children	exhibition	Cyber Power 725VA Battery Back	226.61	139	26	8	5550003	

HALL				
HNAME	PLACE	HID	CAPACITY	
Iris	floor: 2 room: 2034	1	200	
Galilee	floor: 0 room: 0001	2	250	
Eilat	floor: 2 room: 2034	3	200	
Golan	floor: 4 room: 4056	4	300	
Sharon	floor: 0 room: 0001	5	250	
Sinai	floor: 2 room: 2034	6	30	
Hermon	floor: 3 room: 3045	7	80	
Iris	floor: 2 room: 2034	8	80	
Negev	floor: 6 room: 6078	9	150	
Negev	floor: 2 room: 2034	10	500	
Galilee	floor: 1 room: 1023	11	50	
Sinai	floor: 3 room: 3045	12	80	
Hermon	floor: 5 room: 5067	13	200	
Hermon	floor: 1 room: 1023	14	30	
Sharon	floor: 4 room: 4056	15	50	
Negev	floor: 0 room: 0001	16	30	
Eilat	floor: 5 room: 5067	17	50	
Carmel	floor: 3 room: 3045	18	50	
Sinai	floor: 1 room: 1023	19	250	
Eilat	floor: 0 room: 0001	20	500	
Iris	floor: 1 room: 1023	21	300	
Eilat	floor: 3 room: 3045	22	150	
Galilee	floor: 1 room: 1023	23	80	
Eilat	floor: 2 room: 2034	24	500	

הכנסת נתונים עם קוד python

חלק מן הקוד:

```
import random
from datetime import datetime, timedelta

def random_date(start, end):
    return start + timedelta(days=random.randint(0, (end - start).days))

def generate_phone_number():
    return "555" + "".join([str(random.randint(0, 9)) for _ in range(4)])

def main():
    # File to write SQL inserts
    with open("InsertTablesByPython.sql", "w") as file:
        # Parameters for data generation
        num_entries = 15

        # Generating and writing data for Hall table
        for i in range(1, num_entries + 1):
            hname = f"Hall {i}"
            place = f"Location {i}"
            hid = i
            capacity = random.randint(20, 300)
            file.write(f"INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('{hname}', '{place}', {hi

        # Generating and writing data for Person table
        persons = []
        for i in range(1, num_entries + 1):
            address = f"{i * 123} Elm St"
            mail = f"person{i}@example.com"
            main_phone = generate_phone_number()
            age = random.randint(20, 60)
            pname = f"Person {i}"
            persons.append((address, mail, main_phone, age, pname))
            file.write(f"INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('{address}'

        # Generating and writing data for Manager table
        for i in range(1, num_entries + 1):
            mrole = random.choice(['Event Coordinator', 'Senior Manager', 'Assistant Manager', 'Operat

        # Generating and writing data for Event table
        start_date = datetime.strptime('2024-06-01', '%Y-%m-%d')
        end_date = datetime.strptime('2024-06-30', '%Y-%m-%d')
        for i in range(1, num_entries + 1):
            edate = random_date(start_date, end_date).strftime('%Y-%m-%d')
            etime = random.randint(1000, 1800)
            audience = random.choice(['Children', 'Adults', 'Family', 'Teens', 'Seniors'])
            category = random.choice(['Education', 'Health', 'Entertainment', 'Literature', 'History', 'Musi
            activityd = f"Activity Description {i}"
            price = round(random.uniform(5.00, 20.00), 2)
            duration = random.randint(45, 180)
            eid = i
            hid = random.randint(1, num_entries)
            main_phone = random.choice(persons)[2]
            file.write(f"INSERT INTO Event (EDate, ETime, Audience, ECategory, ActivityD, Price, Duration, EI

        # Generating and writing data for Event_Operator table
        for i in range(1, num_entries + 1):
            eid = i
            main_phone = random.choice(persons)[2]
            file.write(f"INSERT INTO Event_Operator (EID, MainPhone) VALUES ({eid}, '{main_phone}');\n")

        # Generating and writing data for Event_Participant table
        for i in range(1, num_entries + 1):
            review = random.randint(1, 5)
            seat_number = random.randint(1, 200)
            card_num = random.randint(10000000000, 99999999999)
            signup_date = random_date(start_date, end_date).strftime('%Y-%m-%d')
            eid = i
            main_phone = random.choice(persons)[2]
            file.write(f"INSERT INTO Event_Participant (Review, SeatNumber, CardNum, SignUpDate, EID, MainPho
```

חלק מן הפקודות שנוצרו:

```
C: > Users > halel > OneDrive - gjct.ac.il > מסמכים > לימודים > מיניפ בסיסי נתונים > InsertTablesByPython.sql

1  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 1', 'Location 1', 1, 243);
2  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 2', 'Location 2', 2, 25);
3  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 3', 'Location 3', 3, 211);
4  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 4', 'Location 4', 4, 265);
5  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 5', 'Location 5', 5, 246);
6  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 6', 'Location 6', 6, 58);
7  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 7', 'Location 7', 7, 173);
8  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 8', 'Location 8', 8, 104);
9  INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 9', 'Location 9', 9, 295);
10 INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 10', 'Location 10', 10, 128);
11 INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 11', 'Location 11', 11, 98);
12 INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 12', 'Location 12', 12, 88);
13 INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 13', 'Location 13', 13, 135);
14 INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 14', 'Location 14', 14, 286);
15 INSERT INTO Hall (HName, Place, HID, Capacity) VALUES ('Hall 15', 'Location 15', 15, 129);
16 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('123 Elm St', 'person1@example.com', '555
17 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('246 Elm St', 'person2@example.com', '555
18 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('369 Elm St', 'person3@example.com', '555
19 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('492 Elm St', 'person4@example.com', '555
20 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('615 Elm St', 'person5@example.com', '555
21 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('738 Elm St', 'person6@example.com', '555
22 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('861 Elm St', 'person7@example.com', '555
23 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('984 Elm St', 'person8@example.com', '555
24 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('1107 Elm St', 'person9@example.com', '55
25 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('1230 Elm St', 'person10@example.com', '5
26 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('1353 Elm St', 'person11@example.com', '5
27 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('1476 Elm St', 'person12@example.com', '5
28 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('1599 Elm St', 'person13@example.com', '5
29 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('1722 Elm St', 'person14@example.com', '5
30 INSERT INTO Person (Address, Mail, MainPhone, Age, Pname) VALUES ('1845 Elm St', 'person15@example.com', '5
31 INSERT INTO Manager (MRole, Seniority, MainPhone) VALUES ('Assistant Manager', 14, '5555832');
32 INSERT INTO Manager (MRole, Seniority, MainPhone) VALUES ('Senior Manager', 16, '5552340');
33 INSERT INTO Manager (MRole, Seniority, MainPhone) VALUES ('Event Coordinator', 10, '5553380');
34 INSERT INTO Manager (MRole, Seniority, MainPhone) VALUES ('Operations Manager', 10, '5553368');
35 INSERT INTO Manager (MRole, Seniority, MainPhone) VALUES ('Event Coordinator', 12, '5551119');
36 INSERT INTO Manager (MRole, Seniority, MainPhone) VALUES ('Operations Manager', 13, '5559394');
37 INSERT INTO Manager (MRole, Seniority, MainPhone) VALUES ('Junior Manager', 17, '5552448');

INSERT INTO ActivityOperator (OCost, Expertise, Gender, MainPhone) VALUES (121.65, 'Science educator', 'Female', '5557095');
INSERT INTO ActivityOperator (OCost, Expertise, Gender, MainPhone) VALUES (129.03, 'Yoga guide', 'Male', '5557095');
INSERT INTO ActivityOperator (OCost, Expertise, Gender, MainPhone) VALUES (151.64, 'Yoga guide', 'Female', '5557095');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user1', 1444, 'Child', '5555832');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user2', 6240, 'Senior', '5552340');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user3', 7097, 'Adult', '5553380');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user4', 3597, 'Senior', '5553368');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user5', 2017, 'Adult', '5551119');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user6', 2010, 'Child', '5559394');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user7', 2307, 'Senior', '5552448');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user8', 1861, 'Teen', '5551604');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user9', 8738, 'Adult', '5552568');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user10', 7032, 'Teen', '5550968');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user11', 8630, 'Adult', '5559933');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user12', 5450, 'Child', '5553686');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user13', 6976, 'Adult', '5557172');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user14', 2355, 'Child', '5559074');
INSERT INTO Participant (UserName, PPassword, PType, MainPhone) VALUES ('user15', 3378, 'Senior', '5558034');
INSERT INTO Person_More_Phone (More_Phone, MainPhone) VALUES ('5557095', '5555832');
INSERT INTO Person_More_Phone (More_Phone, MainPhone) VALUES ('5556526', '5552340');
INSERT INTO Person_More_Phone (More_Phone, MainPhone) VALUES ('5556835', '5553380');
INSERT INTO Person_More_Phone (More_Phone, MainPhone) VALUES ('5553134', '5553368');
INSERT INTO Person_More_Phone (More_Phone, MainPhone) VALUES ('5552321', '5551119');
INSERT INTO Person_More_Phone (More_Phone, MainPhone) VALUES ('5554131', '5559394');
INSERT INTO Person_More_Phone (More_Phone, MainPhone) VALUES ('5557095', '5552448');
```


הכנסת נתונים דרך Mockaroo

שימוש באתר:

The screenshot shows the Mockaroo website interface. At the top, there's a navigation bar with links: SCHEMAS, DATASETS, MOCK APIS, SCENARIOS, PROJECTS, FUNCTIONS, and buttons for SIGN IN and UPGRADE NOW. Below the navigation bar, a message states: "Need more data? Plans start at just \$60/year. Mockaroo is also available as a docker image that you can deploy in your own private cloud." The main area is a configuration table for a dataset named "Event_Participant".

Field Name	Type	Options
Review	ICD9 Proc Desc (Sh...	blank: 0% [Σ] [X]
SeatNumber	Number	min: 12 max: 999 decimals: 0 blank: 0% [Σ] [X]
CardNum	Number	min: 1000 max: 9000 decimals: 0 blank: 0% [Σ] [X]
FlightDate	Datetime	05/22/2023 to 05/22/2024 format: m/d/yyyy blank: 0% [Σ] [X]
ZIP	Phone	format: #####-#### blank: 0% [Σ] [X]
MainPhone	Phone	format: #####-#### blank: 0% [Σ] [X]

Below the table, there are buttons: "+ ADD ANOTHER FIELD" and "GENERATE FIELDS USING AI...". At the bottom, there's a section for "# Rows: 400", "Format: SQL", "Table Name: Event_Participant", and a checkbox "Include CREATE TABLE". At the very bottom, there are buttons: "GENERATE DATA", "PREVIEW", "SAVE AS...", "DERIVE FROM EXAMPLE...", and "MORE".

חלק מן הפקודות שנוצרו:

```
C: > Users > daniel > Desktop > Person.sql
1 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('59746 Mallard Avenue', 'jyepiskov0@netlog.com', '7938262589', '
2 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('72678 Roxbury Alley', 'gmerdew1@etsy.com', '1794405930', '14-34
3 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('074 8th Drive', 'orapps2@hatena.ne.jp', '8209392764', '80-896-2
4 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('7 Meadow Valley Way', 'ehathway3@phpbb.com', '2447576877', '76-
5 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('6465 Walton Road', 'tjohl14@about.com', '5663046222', '63-070-07
6 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('58 Sullivan Junction', 'syoun5@technorati.com', '2711538487',
7 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('404 Beilfuss Park', 'fpapierz6@digg.com', '4461171750', '95-836
8 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('7577 Sullivan Lane', 'tplimmer7@ocn.ne.jp', '8125534679', '13-6
9 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('892 Mendota Junction', 'htease8@timesonline.co.uk', '4512841262
10 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('9422 Sullivan Crossing', 'khilllock9@gov.uk', '7735645405', '53-
11 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('86 Clemons Plaza', 'plyosika@de.vu', '5799439646', '35-002-8560
12 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('575 Derek Trail', 'mbutterfieldb@squarespace.com', '2091681671'
13 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('63837 Erie Terrace', 'morisc@woothemes.com', '9762559797', '77-
14 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('15624 Superior Parkway', 'lperisd@marketwatch.com', '2072913923
15 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('057 Swallow Pass', 'kbingee@dailymail.co.uk', '2352130089', '90
16 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('8395 Arkansas Court', 'nmethamf@hatena.ne.jp', '6166375696', '9
17 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('02775 Anzinger Court', 'nkinsong@upenn.edu', '4637527717', '40-
18 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('819 Village Green Hill', 'bcantrillh@columbia.edu', '4563471949
19 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('11 Luster Avenue', 'ahurlstoni@xing.com', '1484501201', '20-858
20 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('63 Crowley Crossing', 'cvanz@army.mil', '1822359497', '36-023-4
21 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('0 Saint Paul Terrace', 'kkittlessk@canalblog.com', '3765529169'
22 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('24 Claremont Way', 'jbarringer1@hugedomains.com', '5419266601',
23 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('5919 Tennyson Plaza', 'adem@gizmodo.com', '9001060105', '18-812
24 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('4 Cottonwood Terrace', 'tpressn@sitemeter.com', '2638940170', '
25 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('14494 Messerschmidt Terrace', 'mwolferso@foxnews.com', '3039574
26 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('68 Oakridge Circle', 'rwillgrassp@forbes.com', '1546210565', '4
27 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('1249 Heath Terrace', 'ecolqueranq@blog.com', '1094143040', '89-
28 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('5969 Spaight Place', 'rgumleyr@aboutads.info', '7316622972', '4
29 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('32546 Holmberg Alley', 'fdencss@fema.gov', '4705691089', '81-15
30 insert into Person (Address, Mail, MainPhone, Age, Pname) values ('471 Hazelcrest Pass', 'mboltt@bluehost.com', '4456145153', '06-
```

גיבוי ושחזור הטבלאות

גיבוי:

Name	Type	Compiled
ACTIVITYOPERATOR	TABLE	22/05/2024 21:58:34
EVENT	TABLE	22/05/2024 21:58:34
EVENT_OPERATOR	TABLE	22/05/2024 21:58:34
EVENT_PARTICIPANT	TABLE	22/05/2024 21:58:34
HALL	TABLE	22/05/2024 21:58:34
MANAGER	TABLE	22/05/2024 21:58:34
MANAGER_WORKING_DAYS	TABLE	22/05/2024 21:58:34
MVIEWS_ADV_AUG	TABLE	04/02/2019 04:48:34
MVIEWS_ADV_BASSETABLE	TABLE	04/02/2019 04:48:34
MVIEWS_ADV_CLIQUE	TABLE	04/02/2019 04:48:34
MVIEWS_ADV_ELIGIBLE	TABLE	04/02/2019 04:48:34
MVIEWS_ADV_EXCEPTIONS	TABLE	04/02/2019 04:48:34
PARTICIPANT	TABLE	22/05/2024 21:58:34
PERSON	TABLE	22/05/2024 21:58:34
PERSON_MORE_PHONE	TABLE	22/05/2024 21:58:34
SQLPLUS_PRODUCT_PROFILE	TABLE	04/02/2019 05:51:04

User: <CURRENT USER>

Oracle Export SQL Inserts PL/SQL Developer Log

☐ Drop tables ☒ Create tables ☐ Truncate tables ☒ Delete records ☒ Disable triggers

☒ Disable foreign key constraints ☐ Include storage ☒ Include privileges

Commit every 100 records (0 = never)

☐ Zip Where clause

Output file: C:\Users\halel\OneDrive - g.jct.ac.il\מסמכים\לימודים\מיניפ בסיסי נתונים\backup22.05.24.sql

Export

SYSTEM@XE Exporting... Done

שחזור:

Oracle Import SQL Inserts PL/SQL Developer Log

☐ Use Command Window ☒ Use SQL*Plus

SQL*Plus Executable

C:\app\halel\product\18.0.0\dbhomeXE\bin\sqlplus

Tables
HALL
PERSON
MANAGER
ACTIVITYOPERATOR
PARTICIPANT
PERSON_MORE_PHONE
MANAGER_WORKING_DAYS
EVENT
EVENT_OPERATOR
EVENT_PARTICIPANT
Indexes

Import file

C:\Users\halel\OneDrive - g.jct.ac.il\מסמכים\לימודים\מיניפ בסיסי נתונים\backup22.05.24.sql

SYSTEM@XE Executing Oracle SQL*Plus Utility, please wait... Done