

README

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Group No. 05

Source of the data:

The data pertaining to the Student table was acquired by doing a survey of our classmates, peers and friends who attend UMD and use the services of the University Health Center. We have asked for these details via a google form to populate our database. For the data pertaining to the Employee table, we have referred the UHC Website's staff directory (<https://health.umd.edu/about-us/meet-our-staff>) and chose relevant and appropriate staff members to populate our database.

Testing Our Database:

We run the following query to check if all our tables are correctly populated and working optimally.

```
SELECT *  
FROM [Wellness.Student]  
SELECT *  
FROM [Wellness.Employee]  
SELECT *  
FROM [Wellness.Vaccination]  
SELECT *  
FROM [Wellness.Testing]  
SELECT *  
FROM [Wellness.Record]  
SELECT *  
FROM [Wellness.Perform]  
SELECT *  
FROM [Wellness.Payment]
```

Student Table:

	stuld	stuFirstName	stuLastName	stuLocation	stuEmail	stuGender	stuCourse	stuInsurance	stuDOB
1	S117444377	Deep	Singh	Off Campus	pds11@umd.edu	M	In Person	School	1997-10-30
2	S117657432	Jack	Wesolowski	Off Campus	jackw2@terpmail.umd.edu	M	Online	Other	2000-01-12
3	S118602394	Shivani	Mehta	Off Campus	shiv9796@umd.edu	F	Online	Other	1996-07-09
4	S119158562	Jia-Pei	Wu	Off Campus	jiapei22@umd.edu	F	In Person	Other	1999-08-01
5	S119222041	Shival	Sehgal	Off Campus	ssehgal7@umd.edu	M	In Person	School	1997-05-12
6	S119252109	Zehao	Lin	Off Campus	zlin1013@umd.edu	M	In Person	School	1999-10-13
7	S119256534	Rishikesh	Jadhav	On Campus	rjadhav1@umd.edu	M	In Person	School	1999-12-22
8	S119256633	Ria	Moghe	On Campus	riamoghe@ummd.edu	F	In Person	School	1999-02-09

Employee Table:

	empld	empFirstName	empLastName	empGender	empType	empInsurance
1	E202010010	Anu	Abraham	F	Nurse	University
2	E202010015	Carrie	Jacobs	F	Clinician	University
3	E202010017	Sabina	Trejo	F	Clinician	Personal
4	E202010020	Charon	Wallace	F	Nurse	Personal
5	E202010033	George	Thomas	M	Assistant Nurse	University
6	E202010040	Joy	Howard	F	Clinician	Personal
7	E202010045	Andrea	Potter	F	Nurse	University

Vaccination Table:

	vacId	vacType	vacDate	vacStatus	vacCost
1	V202110001	HPV Vaccine	2021-07-19	First Shot	10
2	V202110003	Covid-19 Vaccine	2021-12-10	Second Shot	15
3	V202110004	Covid-19 Vaccine	2021-06-01	First Shot	20
4	V202110005	Covid-19 Vaccine	2021-06-13	First Shot	20
5	V202110008	Flu Shot	2021-06-15	Completed	10
6	V202110009	Covid-19 Vaccine	2021-06-03	First Shot	20
7	V202110010	Covid-19 Vaccine	2021-06-05	First Shot	20
8	V202110011	Flu Shot	2021-07-19	Completed	10

Testing Table:

	tstId	tstDate	tstType	tstResult	tstCost
1	T201505117	2021-07-05	Blood Test	Good	10
2	T201505118	2021-06-19	Strep Test	Negative	15
3	T201505125	2021-08-15	Strep Test	Negative	15
4	T201505128	2021-05-29	Covid Test	Positive	10
5	T201505130	2022-01-29	Covid Test	Positive	10
6	T201505133	2021-06-01	Covid Test	Negative	10
7	T201505138	2021-08-10	Strep Test	Negative	15
8	T201505140	2021-08-15	Covid Test	Positive	10

Record Table:

	vacld	stuld	empld
1	V202110001	S119399545	E202010033
2	V202110003	S119365724	E202010010
3	V202110004	S119365724	E202010020
4	V202110005	S119256534	E202010020
5	V202110008	S119422601	E202010017
6	V202110009	S117444377	E202010020
7	V202110010	S119256633	E202010020
8	V202110011	S119158562	E202010015

Perform Table:

	vacld	stuld	empld
1	V202110001	S119399545	E202010033
2	V202110003	S119365724	E202010010
3	V202110004	S119365724	E202010020
4	V202110005	S119256534	E202010020
5	V202110008	S119422601	E202010017
6	V202110009	S117444377	E202010020
7	V202110010	S119256633	E202010020
8	V202110011	S119158562	E202010015

Payment Table:

	pmtld	pmtDate	vacld	tsld
1	P245632336	2021-09-14	V202110011	T201505169
2	P245632342	2021-08-20	NULL	T201505197
3	P245632344	2022-01-20	V202110008	T201505138
4	P245632345	2021-09-10	V202110010	T201505140
5	P245632350	2021-09-14	V202110009	T201505150
6	P245632353	2021-12-15	V202110013	NULL
7	P245632360	2021-07-15	V202110005	T201505128
8	P245632370	2022-01-04	V202110080	T201505125

MISSION OBJECTIVES:

We aim to achieve our mission objectives based on the following few business transactions.

Transaction Number 1:

What are the details of students who have taken Covid-19 vaccines and tested negative in COVID test:

```

SELECT DISTINCT s.stuId AS 'Student ID', CONCAT(s.stuFirstName, ' ', s.stuLastName) AS
'Student Name', s.stuGender AS 'Gender', s.stuEmail AS 'E-mail ID', s.stuCourse AS 'Course',
s.stuInsurance AS 'Insurance Type', s.stuLocation AS 'Location', s.stuDOB AS 'Date of Birth'
FROM [Wellness.Record] r, [Wellness.Perform] p, [Wellness.Student] s,
[Wellness.Vaccination] v, [Wellness.Testing] t
WHERE (r.vacId = v.vacId) AND (r.stuId = s.stuId) AND (v.vacType = 'Covid-19 Vaccine')
AND (p tstId = t.tstId) AND (p.stuId = s.stuId) AND (t.tstType = 'Covid Test')
AND (t.tstResult = 'Negative')

```

Result:

Student ID	Student Name	Gender	E-mail ID	Course	Insurance Type	Location	Date of Birth
S117444377	Deep Singh	M	pds11@umd.edu	In Person	School	Off Campus	1997-10-30
S119365724	Nishank Shah	M	nishank7@umd.edu	In Person	School	Off Campus	1998-12-15

Transaction Number 2:

What are the names and Employee ID(s) of employee(s) who have administered most number of vaccines?

```

SELECT DISTINCT s.stuId AS 'Student ID', CONCAT(s.stuFirstName, ' ', s.stuLastName) AS
'Student Name', s.stuGender AS 'Gender', s.stuEmail AS 'E-mail ID', s.stuCourse AS 'Course',
s.stuInsurance AS 'Insurance Type', s.stuLocation AS 'Location', s.stuDOB AS 'Date of Birth'
FROM [Wellness.Record] r, [Wellness.Student] s, [Wellness.Vaccination] v
WHERE (r.vacId = v.vacId) AND (r.stuId = s.stuId) AND (v.vacType = 'Covid-19 Vaccine')

```

Result:

Employee ID	Employee Name	Number of Vaccinations Administered
E202010020	Charon Wallace	5

Transaction Number 3:

What are the details of all the students who have taken COVID-19 vaccine?

```
SELECT r1.empId AS 'Employee ID', CONCAT(e.empFirstName, ' ', e.empLastName) AS  
'Employee Name',
```

```
COUNT(r1.empId) AS 'Number of Vaccinations Administered' FROM [Wellness.Record] r1,  
[Wellness.Employee] e
```

```
WHERE e.empId = r1.empId GROUP BY r1.empId, e.empFirstName, e.empLastName HAVING  
COUNT(r1.empId) = (
```

```
SELECT TOP 1 COUNT(r1.empId) FROM [Wellness.Record] r1 GROUP BY r1.empId ORDER BY  
COUNT(r1.empId) DESC)
```

Result:

Student ID	Student Name	Gender	E-mail ID	Course	Insurance Type	Location	Date of Birth
S117444377	Deep Singh	M	pds11@umd.edu	In Person	School	Off Campus	1997-10-30
S118602394	Shivani Mehta	F	shiv9796@umd.edu	Online	Other	Off Campus	1996-07-09
S119256534	Rishikesh Jadhav	M	rjadhav1@umd.edu	In Person	School	On Campus	1999-12-22
S119256633	Ria Moghe	F	riamoghe@ummd.edu	In Person	School	On Campus	1999-02-09
S119365724	Nishank Shah	M	nishank7@umd.edu	In Person	School	Off Campus	1998-12-15
S119385289	Rashi Sharma	F	rashis18@umd.edu	In Person	School	On Campus	1998-07-18

Transaction Number 4:

What are the number of different vaccines taken by students in decreasing order?

```
SELECT v.vacType AS 'Vaccination Type', COUNT(v.vacId) AS 'Count of Vaccines Administered'
```

```
FROM [Wellness.Vaccination] v
```

```
GROUP BY v.vacType
```

```
ORDER BY COUNT(v.vacId) DESC;
```

Result:

Vaccination Type	Count of Vaccines Administered
Covid-19 Vaccine	11
HPV Vaccine	4
Flu Shot	3

Transaction Number 5:

What is the total amount billed on each of the tests and vaccinations?

SELECT RESULTS.*

FROM(

SELECT DISTINCT v.vacType AS "Service Name", SUM(v.vacCost) AS "Total Cost of Services"

FROM [Wellness.Vaccination] v

GROUP BY v.vacType

UNION

SELECT DISTINCT t.tstType AS "Service Name", SUM(t.tstCost) AS "Total Cost of Services"

FROM [Wellness.Testing] t

GROUP BY t.tstType

) RESULTS

ORDER BY RESULTS.[Total Cost of Services] DESC

Result:

Service Name	Total Cost of Services
Covid-19 Vaccine	185
Covid Test	80
Strep Test	60
HPV Vaccine	40
Blood Test	30
Flu Shot	30

Transaction Number 6:

What are the details of students that are cleared to enter the University [Fully vaccinated or covid negative in last 30 days]:

```
SELECT DISTINCT s.stuld AS "Student ID", CONCAT(s.stuFirstName, ' ', s.stuLastName) AS "Student Name",  
                s.stuGender AS "Gender", s.stuLocation AS "Location", s.stuEmail AS "E-mail ID",  
                s.stuDOB AS "Date Of Birth"  
FROM [Wellness.Record] r, [Wellness.Perform] p, [Wellness.Student] s,  
[Wellness.Vaccination] v, [Wellness.Testing] t  
WHERE ((r.vacId = v.vacId) AND (r.stuld = s.stuld) AND (v.vacType = 'Covid-19 Vaccine'))  
OR ((p.tstId = t.tstId) AND (p.stuld = s.stuld) AND (t.tstType = 'Covid Test'))  
AND (DATEDIFF(DAY, t.tstDate, GETDATE()) < 30))
```

Result:

Student ID	Student Name	Gender	Location	E-mail ID	Date Of Birth
S117444377	Deep Singh	M	Off Campus	pds11@umd.edu	1997-10-30
S118602394	Shivani Mehta	F	Off Campus	shiv9796@umd.edu	1996-07-09
S119256534	Rishikesh Jadhav	M	On Campus	rjadhav1@umd.edu	1999-12-22
S119256633	Ria Moghe	F	On Campus	riamoghe@ummd.edu	1999-02-09
S119365724	Nishank Shah	M	Off Campus	nishank7@umd.edu	1998-12-15
S119385289	Rashi Sharma	F	On Campus	rashis18@umd.edu	1998-07-18