University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: ___4_____

Date: _____2023.11.30_____

Group Number: _____132_____

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia.

(a)   Project Description

The UBC Event Collection Application is designed to gather the comprehensive information of an event in the UBC community. It aims to simplify the process of tracking the event-related data. To achieve the goals mentioned above, the database will include the following entities: Event, Organizer, Team Member, Event Photo, Participant, Feedback, Sponsor. Each of these entities has crucial information regarding the event, thus ensuring that the application effectively collects and stores all the essential data. The final project has been accomplished by storing the data mentioned above in the database and with various functionality for a web front end. The front end now has the following functionality: insert event, delete existing event, display all events, view attributes of a table in the database, searching and view for specific events/sponsor/organizers by certain criteria.

(b)   Final Schema

We removed Organizer_EmailandName, Event_NameandDescpription from the schema turned in MileStone #2, since the two schemas are not necessary and have redundant information from other schemas. Other than this, we have renamed Organized_Event to Event, Leaded_TeamMember to Team_Member etc for having a better understanding. Finally, we also changed the domain of some features like MemberName in Team_Member from char(10) to Varchar(255) to make the domain more reasonable.

(c) Copy of the Schema and Screenshots

Organizer(OrganizerID: integer, OrganizerName:varchar(255), OrganizerEmail: varchar, OrganizerPhoneNo: char(10))

ORGANIZERID	ORGANIZERNAME	ORGANIZEREMAIL	ORGANIZERPHONENO
1	UBC Science	contact@ubcscience.ca	6041234567
2	UBC Tech Club	techclub@ubc.ca	6041234568
3	IKB	ikb@ubc.ca	6041234569

Event(EventID: integer, **OrganizerID**: integer, EventDate: date, Expense: integer, EventTime: char(5), EventName: varchar(255))

EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
101	1	2023-12-15	5000	18:00	Tech Expo 2023
102	1	2023-10-07	3000	09:00	DevFest
103	2	2023-11-22	4000	12:00	Literature Festival
104	2	2023-09-05	2000	10:00	Robotics Workshop
105	3	2023-08-20	3500	14:00	Art History Exhibition
106	3	2023-07-11	2500	16:00	Historical Archives Tour

Sponsor_Support(**EventID**: integer, **SponsorName**: varchar(255), **SponsorPhoneNo**: char(10),SponsorshipType: varchar(255), EstimatedValue: integer(255))

EVENTID	SPONSORNAME	SPONSORPHONENO	SPONSORSHIPTYPE	ESTIMATEDVALUE
101	Google	8001234567	Financial	10000
102	Google	8001234567	In-Kind	12000
103	Google	8001234567	Media	15000
104	Google	8001234567	Technical	11000
105	Amazon	8001234568	Financial	16000
102	Microsoft	8001234569	In-Kind	20000
102	Microsoft	8001234569	Financial	20000
102	Microsoft	8001234569	Technical	20000
102	Microsoft	8001234569	Media	20000
102	Adobe	8001234570	Media	14000
101	Intel	8001234571	Technical	17000

Sponsor(SponsorName: varchar(255), SponsorPhoneNo: char(10), SponsorEmail: varchar(255))

	SPONSORNAME	SPONSORPHONENO	SPONSOREMAIL
1	Google	8001234567	sponsor@google.com
2	Amazon	8001234568	sponsor@amazon.com
3	Microsoft	8001234569	sponsor@microsoft.com
4	Adobe	8001234570	sponsor@adobe.com
5	Intel	8001234571	sponsor@intel.com
6	Tesla	8001234572	sponsor@tesla.com

Feedback(FeedbackID: integer, **EventID**: integer, Rating: integer, Feedback: varchar(255))

	FEEDBACKID	EVENTID	RATING	FEEDBACK
1	1004	104	5	Outstanding workshop with hands-on experience.
2	1005	105	4	Very informative and well-presented exhibition.
3	1006	106	5	Incredible tour, rich in history and detail.
4	1007	101	4	Impressive tech displays and networking opportunities.
5	1008	102	4	Well-organized event with great speakers.
6	1009	103	2	Interesting topics, but the sessions were too long.
7	1010	104	3	Robotics concepts were great, but needed more practical examples.
8	1011	105	5	Fantastic curation of art pieces and knowledgeable guides.
9	1012	106	3	Enjoyable tour, but it felt a bit rushed.

Attendance(**EventID**: integer, **ParticipantID**: integer)

|	EVENTID	PARTICIPANTID
1	101	501
2	101	502

Participant(ParticipantID: integer, ParticipantName: varchar(255), ParticipantEmail: varchar(255))

	PARTICIPANTID	PARTICIPANTNAME	PARTICIPANTEMAIL
1	501	Howard	howards@ubc.ca
2	502	Jerry	jerryc@ubc.ca

Event_Photo(**EventID**: integer, PhotoID: integer, Description: varchar(255))

PHOTOID	EVENTID	DESCRIPTION
2001	101	Opening Ceremony Photo

Event_And_Location(**EventID**: integer, **Address**: varchar, EventDate: date, Expense: integer, EventTime:char(5), EventName:varchar(255)

EVENTID	ADDRESS	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
101	UBC Robson Square, 800 Robson St	2023-12-15	5000	18:00	Tech Expo 2023
102	UBC Life Sciences Centre, 2350 Health Sciences Mall	2023-10-07	3000	09:00	DevFest
103	UBC Nest, 6133 University Blvd	2023-11-22	4000	12:00	Literature Festival
104	UBC Robson Square, 800 Robson St	2023-09-05	2000	10:00	Robotics Workshop

Location(Address: varchar(255), Capacity: integer)

ADDRESS	CAPACITY
UBC Robson Square, 800 Robson St	300
UBC Life Sciences Centre, 2350 Health Sciences Mall	500
UBC Nest, 6133 University Blvd	200

Team_Member(MemberName: varchar(255), MemberPhoneNo: char(10), **OrganizerID**: integer, StaffEmail: varchar(255), PayRate: integer)

MEMBERNAME	MEMBERPHONENO	ORGANIZERID	STAFFEMAIL	PAYRATE
John Doe	7781234567	1	johndoe@ubc.ca	30
Emily Smith	7781234568	1	emilysmith@ubc.ca	35
Alex Johnson	7781234569	2	alexjohnson@ubc.ca	40

Speaker(**MemberName**: varchar(255), **MemberPhoneNo**: char(10), ExpericenceLevel: varchar(255))

MEMBERNAME	MEMBERPHONENO	EXPERIENCELEVEL
John Doe	7781234567	Expert

Photographer(**MemberName**: varchar(255), **MemberPhoneNo**: char(10), Equipment: varchar(255))

MEMBERNAME	MEMBERPHONENO	EQUIPMENT
Alex Johnson	7781234569	Sony A7 III

Volunteer(**MemberName**: varchar(255), **MemberPhoneNo**: char(10), Skill: varchar(255))

MEMBERNAME	MEMBERPHONENO	SKILL
Emily Smith	7781234568	First Aid

(d) Queries:

Insert Operation - /server/models/eventModel.js line 238

```
`INSERT INTO EVENT (EventID, OrganizerID, EventDate, Expense, EventTime, EventName)
VALUES (:EventID, :OrganizerID, TO_TIMESTAMP(:EventDate, 'YYYY-MM-DD"T"HH24:MI:SS.FF3"Z"'), :Expense, :EventTime, :EventName)`,
```

Delete Operation - /server/models/eventModel.js line 321

```
const sqlQuery = 'DELETE FROM EVENT WHERE EventID = :EventID';
```

Update Operation - /server/models/eventModel.js line 306

```
UPDATE EVENT SET EventName = :EventName, EventDate = TO_TIMESTAMP(:EventDate, 'Y
YYY-MM-DD"T"HH24:MI:SS.FF3"Z"'), EventTime = :EventTime, OrganizerID = :Organize
rID, Expense = :Expense WHERE EventID = :EventID
```

Selection - /server/models/eventModel.js line 157

```
SELECT * FROM EVENT WHERE 1=1 AND OrganizerID = :organizerId AND UPPER(EventNa
me) LIKE UPPER(:eventName)
```

Projection - /server/models/databaseModel.js line 27-57

Random example query:

```
SELECT EVENTID, ORGANIZERID, EVENTDATE FROM EVENT
```

Join - /server/models/eventModel.js line 80

```
            SELECT E.EventID, E.EventName, E.EventDate, E.EventTime, O.OrganizerNam
e, AVG(F.Rating) AS AverageRating
            FROM EVENT E
            LEFT JOIN ORGANIZER O ON E.OrganizerID = O.OrganizerID
            LEFT JOIN FEEDBACK F ON E.EventID = F.EventID
        GROUP BY E.EventID, E.EventName, E.EventDate, E.EventTime, O.OrganizerName
```

Aggregation with Group By - /server/models/organizerModel.js line 49

```
const query = `
    SELECT O.OrganizerID, O.OrganizerName, COUNT(E.EventID) AS TotalEventsHosted
    FROM ORGANIZER O
    LEFT JOIN EVENT E ON O.OrganizerID = E.OrganizerID
    GROUP BY O.OrganizerID, O.OrganizerName
`;
```

Aggregation with Having - /server/models/eventModel.js line 133

```
const query = `
    SELECT E.*, AVG(F.Rating) AS AverageRating
    FROM EVENT E
    JOIN FEEDBACK F ON E.EventID = F.EventID
    GROUP BY E.EventID, E.OrganizerID, E.EventDate, E.Expense, E.EventTime, E.EventName
    HAVING AVG(F.Rating) > :ratingThreshold
`;
```

Nested Aggregation with Group By - /server/models/organizerModel.js line 65

```
const query = `
    SELECT MAX(OrganizerRatings.AverageRating) AS HighestAverageRating
    FROM (
        SELECT
            O.OrganizerID,
            O.OrganizerName,
            AVG(F.Rating) AS AverageRating
        FROM ORGANIZER O
        LEFT JOIN EVENT E ON O.OrganizerID = E.OrganizerID
        LEFT JOIN FEEDBACK F ON E.EventID = F.EventID
        GROUP BY O.OrganizerID, O.OrganizerName
    ) OrganizerRatings
`;
const result = await connection.execute(query);
```

Division - /server/models/sponsorModel.js/ line 45

```
const query = `
    SELECT S.SponsorName
    FROM SPONSOR S
    WHERE NOT EXISTS (
        SELECT DISTINCT SS1.SponsorshipType
        FROM SPONSOR_SUPPORT SS1
        WHERE NOT EXISTS (
            SELECT 1
            FROM SPONSOR_SUPPORT SS2
            WHERE SS2.SponsorName = S.SponsorName
            AND SS2.SponsorPhoneNo = S.SponsorPhoneNo
            AND SS2.SponsorshipType = SS1.SponsorshipType
        )
    )
`;
```

(e) Functionality

Insert

Before:

	EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
1	101	1	2023-12-15	5000	18:00	Tech Expo 2023
2	102	1	2023-10-07	3000	09:00	DevFest
3	103	2	2023-11-22	4000	12:00	Literature Festival
4	104	2	2023-09-05	2000	10:00	Robotics Workshop
5	105	3	2023-08-20	3500	14:00	Art History Exhibition
6	106	3	2023-07-11	2500	16:00	Historical Archives Tour

During:

Add Event

| 110 |
| 1 |
| 2023-12-20 |
| 11:20 |
| 4000 |
| Machine Learning Work |

Create Event Click the button

After:

	EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
1	110	1	2023-12-20	4000	11:20	Machine Learning Workshop
2	101	1	2023-12-15	5000	18:00	Tech Expo 2023
3	102	1	2023-10-07	3000	09:00	DevFest
4	103	2	2023-11-22	4000	12:00	Literature Festival
5	104	2	2023-09-05	2000	10:00	Robotics Workshop
6	105	3	2023-08-20	3500	14:00	Art History Exhibition
7	106	3	2023-07-11	2500	16:00	Historical Archives Tour

Delete

Before:

	EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
1	110	1	2023-12-20	4000	11:20	Machine Learning Workshop
2	101	1	2023-12-15	5000	18:00	Tech Expo 2023
3	102	1	2023-10-07	3000	09:00	DevFest
4	103	2	2023-11-22	4000	12:00	Literature Festival
5	104	2	2023-09-05	2000	10:00	Robotics Workshop
6	105	3	2023-08-20	3500	14:00	Art History Exhibition
7	106	3	2023-07-11	2500	16:00	Historical Archives Tour

During:

ID: 102
Name: DevFest
Date: October 7, 2023
Time: 09:00
Average Rating: 4.0
Organizer Name: UBC Science

[Delete]   < — Click

[Update]

After:

	EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
1	110	1	2023-12-20	4000	11:20	Machine Learning Workshop
2	101	1	2023-12-15	5000	18:00	Tech Expo 2023
3	103	2	2023-11-22	4000	12:00	Literature Festival
4	104	2	2023-09-05	2000	10:00	Robotics Workshop
5	105	3	2023-08-20	3500	14:00	Art History Exhibition
6	106	3	2023-07-11	2500	16:00	Historical Archives Tour

Update

Before:

EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
110	1	2023-12-20	4000	11:20	Machine Learning Workshop
101	1	2023-12-15	5000	18:00	Tech Expo 2023
103	2	2023-11-22	4000	12:00	Literature Festival
104	2	2023-09-05	2000	10:00	Robotics Workshop
105	3	2023-08-20	3500	14:00	Art History Exhibition
106	3	2023-07-11	2500	16:00	Historical Archives Tour

During:

ID: 110

Name: Machine Learning Workshop

Date: December 20, 2023

Time: 11:20

Average Rating: null

Organizer Name: UBC Science

Delete

Update   <— Click

1

2023-12-20

11:20

10000   Enter new ~~vlue~~ Value

Updated Machine Learr

Update Event   Then click

After:

EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
110	1	2023-12-20	10000	11:20	Updated Machine Learning Wor…
101	1	2023-12-15	5000	18:00	Tech Expo 2023
103	2	2023-11-22	4000	12:00	Literature Festival
104	2	2023-09-05	2000	10:00	Robotics Workshop
105	3	2023-08-20	3500	14:00	Art History Exhibition
106	3	2023-07-11	2500	16:00	Historical Archives Tour

Selection

Before:

▥ EVENTID ⇕	▥ ORGANIZERID ⇕	▥ EVENTDATE ⇕	▥ EXPENSE ⇕	▥ EVENTTIME ⇕	▥ EVENTNAME ⇕
1	110	1 2023-12-20	10000	11:20	Updated Machine Learning Wor…
2	101	1 2023-12-15	5000	18:00	Tech Expo 2023
3	103	2 2023-11-22	4000	12:00	Literature Festival
4	104	2 2023-09-05	2000	10:00	Robotics Workshop
5	105	3 2023-08-20	3500	14:00	Art History Exhibition
6	106	3 2023-07-11	2500	16:00	Historical Archives Tour
7	111	2 2023-12-20	4000	11:20	New Year Festival

Get events by Organizer ID and partial match on Event Name:

[Organizer ID]

[Partial Event Name]

[Search Events]

All events are returned without inputs

- **Event ID:** 110
  Event Name: Updated Machine Learning Workshop
- **Event ID:** 101
  Event Name: Tech Expo 2023
- **Event ID:** 103
  Event Name: Literature Festival
- **Event ID:** 104
  Event Name: Robotics Workshop
- **Event ID:** 105
  Event Name: Art History Exhibition
- **Event ID:** 106
  Event Name: Historical Archives Tour
- **Event ID:** 111
  Event Name: New Year Festival

During:

Get events by Organizer ID and partial match on Event Name:

[2]

[Fest]

I want events that were organized by Organizer 2, and event names contain "Fest"

[Search Events] ←—Then Click

After:

Get events by Organizer ID and partial match on Event Name:

[2]

[Fest]

[Search Events]   Returned

- **Event ID:** 103
  Event Name: Literature Festival
- **Event ID:** 111
  Event Name: New Year Festival

Projection

Before:

For example we want to view table *Feedback,* with attributes *EVENTID*, *RATING*, and *FEEDBACK*

	FEEDBACKID ⇕	EVENTID ⇕	RATING ⌄	FEEDBACK	⇕
1	1004	104	5	Outstanding workshop with hands-on experience.	
2	1011	105	5	Fantastic curation of art pieces and knowledgeable guides.	
3	1006	106	5	Incredible tour, rich in history and detail.	
4	1005	105	4	Very informative and well-presented exhibition.	
5	1007	101	4	Impressive tech displays and networking opportunities.	
6	1010	104	3	Robotics concepts were great, but needed more practical examples.	
7	1012	106	3	Enjoyable tour, but it felt a bit rushed.	
8	1009	103	2	Interesting topics, but the sessions were too long.	

During:

Projection

Select a table and attributes to view:

FEEDBACKID
EVENTID
RATING
FEEDBACK

FEEDBACK ⌄

View Table   Select and the click the button

After:

Projection

Select a table and attributes to view:

FEEDBACKID
EVENTID
RATING
FEEDBACK

FEEDBACK ⌄

View Table

104	5	Outstanding workshop with hands-on experience.
105	4	Very informative and well-presented exhibition.
106	5	Incredible tour, rich in history and detail.
101	4	Impressive tech displays and networking opportunities.
103	2	Interesting topics, but the sessions were too long.
104	3	Robotics concepts were great, but needed more practical examples.
105	5	Fantastic curation of art pieces and knowledgeable guides.
106	3	Enjoyable tour, but it felt a bit rushed.

Join

Before:

Event table

	EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
1	110	1	2023-12-20	10000	11:20	Updated Machine Learning Wor…
2	101	1	2023-12-15	5000	18:00	Tech Expo 2023
3	103	2	2023-11-22	4000	12:00	Literature Festival
4	104	2	2023-09-05	2000	10:00	Robotics Workshop
5	105	3	2023-08-20	3500	14:00	Art History Exhibition
6	106	3	2023-07-11	2500	16:00	Historical Archives Tour
7	111	2	2023-12-20	4000	11:20	New Year Festival

Organizer table

	ORGANIZERID	ORGANIZERNAME	ORGANIZEREMAIL	ORGANIZERPHONENO
1	1	UBC Science	contact@ubcscience.ca	6041234567
2	2	UBC Tech Club	techclub@ubc.ca	6041234568
3	3	IKB	ikb@ubc.ca	6041234569

Feedback table

	FEEDBACKID	EVENTID	RATING	FEEDBACK
1	1004	104	5	Outstanding workshop with hands-on experience.
2	1011	105	5	Fantastic curation of art pieces and knowledgeable guides.
3	1006	106	5	Incredible tour, rich in history and detail.
4	1005	105	4	Very informative and well-presented exhibition.
5	1007	101	4	Impressive tech displays and networking opportunities.
6	1010	104	3	Robotics concepts were great, but needed more practical examples.
7	1012	106	3	Enjoyable tour, but it felt a bit rushed.
8	1009	103	2	Interesting topics, but the sessions were too long.

During:

You can click "Refresh Events" button or reload the webpage to get the summary list

Event Summary

Refresh Events

ID: 103

After:

Event Summary

Refresh Events

ID: 103
Name: Literature Festival
Date: November 22, 2023
Time: 12:00
Average Rating: 2.0
Organizer Name: UBC Tech Club

Delete
Update

Returned a list of event summary with informatiion joined from Organizer and Feedback Tables

ID: 111
Name: New Year Festival
Date: December 20, 2023
Time: 11:20
Average Rating: null
Organizer Name: UBC Tech Club

Delete
Update

ID: 106
Name: Historical Archives Tour
Date: July 11, 2023
Time: 16:00
Average Rating: 4.0
Organizer Name: IKB

Delete

Aggregation with Group By

Before:

Event table

	EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
1	110	1	2023-12-20	10000	11:20	Updated Machine Learning Workshop
2	101	1	2023-12-15	5000	18:00	Tech Expo 2023
3	103	2	2023-11-22	4000	12:00	Literature Festival
4	104	2	2023-09-05	2000	10:00	Robotics Workshop
5	105	3	2023-08-20	3500	14:00	Art History Exhibition
6	106	3	2023-07-11	2500	16:00	Historical Archives Tour
7	111	2	2023-12-20	4000	11:20	New Year Festival

During:

Calculate the total number of events hosted by each organizer

Calculate   **<— Click to calculate**

After:

Calculate the total number of events hosted by each organizer

Calculate

- **Organizer ID:** 3
  Organizer Name: IKB
  Count: 2
- **Organizer ID:** 2
  Organizer Name: UBC Tech Club
  Count: 3
- **Organizer ID:** 1
  Organizer Name: UBC Science
  Count: 2

Aggregation with Having

Before:

Feedback table

	FEEDBACKID	EVENTID	RATING	FEEDBACK
1	1004	104	5	Outstanding workshop with hands-on experience.
2	1005	105	4	Very informative and well-presented exhibition.
3	1006	106	5	Incredible tour, rich in history and detail.
4	1007	101	4	Impressive tech displays and networking opportunities.
5	1009	103	2	Interesting topics, but the sessions were too long.
6	1010	104	3	Robotics concepts were great, but needed more practical examples.
7	1011	105	5	Fantastic curation of art pieces and knowledgeable guides.
8	1012	106	3	Enjoyable tour, but it felt a bit rushed.

During:

Find events with an average rating higher than:

✓ 0
1
d Events
2
3
4
5
ents by Organizer ID and partial match on

For example: Find all events having an average rating > 3

After:

Find events with an average rating higher than:

[3 ⌄]

[Find Events]

- **Event ID:** 101
  Event Name: Tech Expo 2023
  Average Rating: 4.0
- **Event ID:** 104
  Event Name: Robotics Workshop
  Average Rating: 4.0
- **Event ID:** 105
  Event Name: Art History Exhibition
  Average Rating: 4.5
- **Event ID:** 106
  Event Name: Historical Archives Tour
  Average Rating: 4.0

Nested Aggregation with Group By

Before:

Feedback table

	FEEDBACKID	EVENTID	RATING	FEEDBACK
1	1004	104	5	Outstanding workshop with hands-on experience.
2	1005	105	4	Very informative and well-presented exhibition.
3	1006	106	5	Incredible tour, rich in history and detail.
4	1007	101	4	Impressive tech displays and networking opportunities.
5	1009	103	2	Interesting topics, but the sessions were too long.
6	1010	104	3	Robotics concepts were great, but needed more practical examples.
7	1011	105	5	Fantastic curation of art pieces and knowledgeable guides.
8	1012	106	3	Enjoyable tour, but it felt a bit rushed.

Event table

	EVENTID	ORGANIZERID	EVENTDATE	EXPENSE	EVENTTIME	EVENTNAME
1	110	1	2023-12-20	10000	11:20	Updated Machine Learning Workshop
2	101	1	2023-12-15	5000	18:00	Tech Expo 2023
3	103	2	2023-11-22	4000	12:00	Literature Festival
4	104	2	2023-09-05	2000	10:00	Robotics Workshop
5	105	3	2023-08-20	3500	14:00	Art History Exhibition
6	106	3	2023-07-11	2500	16:00	Historical Archives Tour
7	111	2	2023-12-20	4000	11:20	New Year Festival

During:

Find the highest average rating among all organizers

Calculate

After:

Find the highest average rating among all organizers

Calculate

4.25   Value returned

Division

Before:

Sponsor_Support table

EVENTID	SPONSORNAME	SPONSORPHONENO	SPONSORSHIPTYPE	ESTIMATEDVALUE
101	Google	8001234567	Financial	10000
102	Google	8001234567	In-Kind	12000
103	Google	8001234567	Media	15000
104	Google	8001234567	Technical	11000
105	Amazon	8001234568	Financial	16000
102	Microsoft	8001234569	In-Kind	20000
102	Microsoft	8001234569	Financial	20000
102	Microsoft	8001234569	Technical	20000
102	Microsoft	8001234569	Media	20000
102	Adobe	8001234570	Media	14000
101	Intel	8001234571	Technical	17000

During:

List of sponsors who have supported every type of sponsorship

View Sponsors

After:

List of sponsors who have supported every type of sponsorship

View Sponsors

- Google
- Microsoft

Google and Microsoft are returned because they have supported all four types of sponsorship(Financial, Media, Technical, and In-Kind)