



Team Charlie

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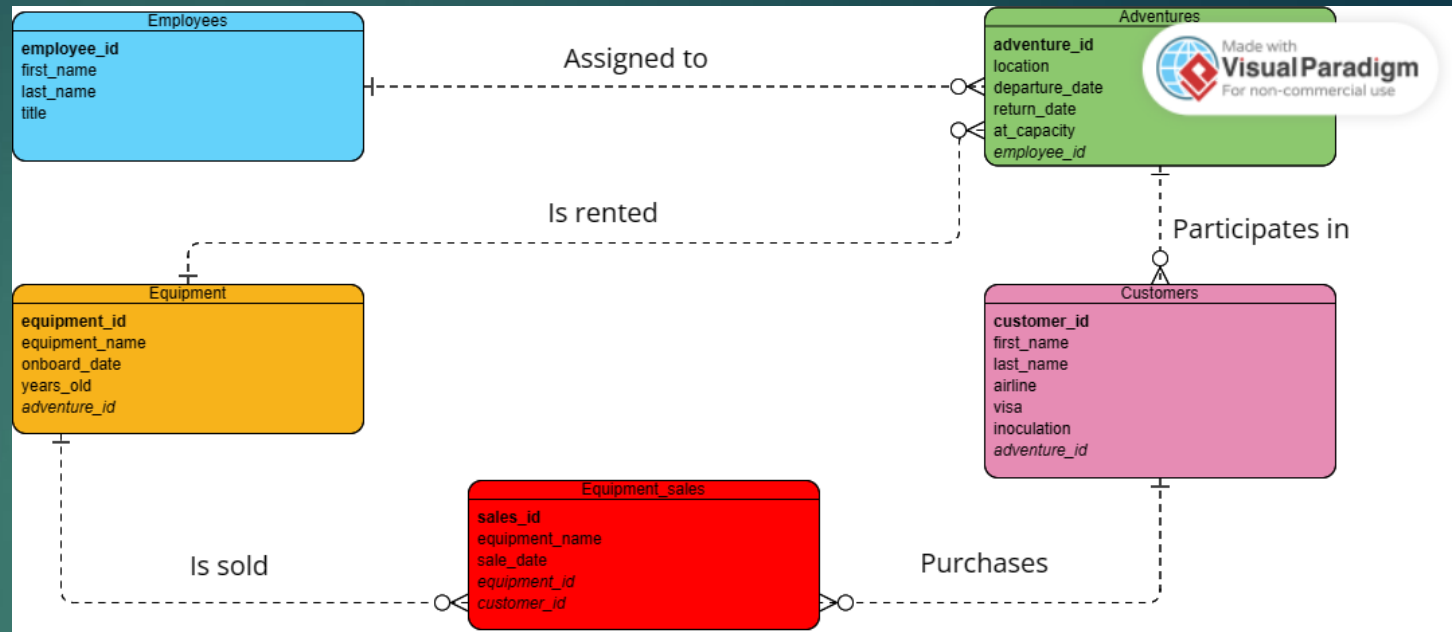
Introductions:

- ▶ Elijah is from the snowy city of Buffalo, New York and is currently working as a Data Analyst. He is 30 years old as of a couple weeks ago and is studying in hopes to join his employer's engineering team after course completion.
- ▶ Gabe is originally from Denver, CO but currently lives in Orlando, FL and is working as an Entertainment Technician at Walt Disney World for the Star Wars Galactic Cruiser. He is 27 years old and has ambitions to fully transition into the tech industry or find a middle ground between tech and live entertainment.
- ▶ Sean lives in Kenosha, WI and is currently in his 3rd year of software development education. He is 21 years old and is studying to complete his bachelor's so he can begin a career as a programmer or DBA.
- ▶ Dan is working overseas in Iraq as a Defense Contractor and is in his final year on contract. Dan enjoys reading, taking his motorcycle out when he can, and is interested in future employment in Cyber Security.

The Case Study: Outland Adventures

- ▶ Blythe Timmerson and Jim Ford, both avid outdoorsmen, founded Outland Adventures to serve similar fans of the wilderness by offering guided hiking and camping trips in far off places, as well as the sale of hiking/camping equipment.
- ▶ Being met with quick success, they both decided to pursue Outland Adventures as their primary focus. They have run trips to Africa, Asia, and Southern Europe, and have also hired a small team to handle the guided tours, supply ordering, marketing, as well as an e-comm site, while they themselves handle the day-to-day operations.
- ▶ Blythe and Jim now turn their eyes towards optimization of their business. Are there parts of our business that are underperforming? How are our sales compared to rentals? Is our equipment in good shape to continue being used on these excursions? These are the questions we aim to answer.

Our ERD:



Elijah Wilkinson
03/03/2023
Module 12.2

One employee can be assigned to many adventures

Many customers can participate in one adventure

One customer may complete many equipment sales

One piece of equipment may have only one sales ID

One piece of equipment can be rented for many adventures

Questions and Answers:

The Questions Asked

- ▶ We have equipment for rent and for sale. Do we sell enough equipment to keep this part of the business?
- ▶ We offer 3 locations for adventuring. Do any of them see a downward trend in booking?
- ▶ We are concerned about the age of some of our equipment. Is any equipment over 5 years old?

The Reports that Answer

- ▶ Equipment Sales table
- ▶ Adventures table innerjoin with Customers table
- ▶ Equipment table left join Equipment Sales table.

Screenshots of report queries with time/date stamps on following slides ->

Question 1: Do we sell enough equipment to keep this part of our business?

By viewing the equipment that we've sold, along with the date we've sold it, we can make an educated decision as to whether or not we should keep sales.

Upon reviewing the data, we don't sell gear very frequently; on top of that, when we do sell gear it's generally at low margin. It would benefit us to cease equipment sales and maintain our equipment stock as rentals only.

```
mysql> select now();
+-----+
| now() |
+-----+
| 2023-03-03 23:06:09 |
+-----+
1 row in set (0.01 sec)
```

```
mysql> SELECT sales_id, equipment_name, sale_date FROM equipment_sales ORDER BY equipment_name;
+-----+-----+-----+
| sales_id | equipment_name | sale_date |
+-----+-----+-----+
| 37 | Flaregun | 2015-06-12 |
| 42 | Flaregun | 2017-06-13 |
| 47 | Flaregun | 2017-09-05 |
| 35 | Gloves | 2015-06-12 |
| 40 | Gloves | 2017-04-15 |
| 45 | Gloves | 2017-09-01 |
| 33 | Radio | 2015-01-12 |
| 38 | Radio | 2015-06-12 |
| 43 | Radio | 2017-06-13 |
| 34 | Rope | 2015-03-13 |
| 39 | Rope | 2015-06-12 |
| 44 | Rope | 2017-06-13 |
| 36 | Tent | 2015-06-12 |
| 41 | Tent | 2017-06-13 |
| 46 | Tent | 2017-09-01 |
+-----+-----+-----+
15 rows in set (0.00 sec)
```

Question 2: Do any of our adventures have a downward trend in booking?

By selecting our adventure IDs, along with the locations attached to those IDs and their respective "at capacity" statuses, we can ascertain which locations, if any, have seen a downward trend in bookings.

Upon review, we can see that 2/3 Southern Europe adventures only had 2 customers instead of being filled. We do not want to drop Southern Europe from our roster, so we will discuss with Anita, our Marketing Manager, how we can best reach more customers and generate interest in our Southern Europe booking.

```
mysql> select now();
+-----+
| now() |
+-----+
| 2023-03-03 23:08:45 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT adventure_id, at_capacity, location, departure_date, return_date FROM adventures;
+-----+-----+-----+-----+-----+
| adventure_id | at_capacity | location      | departure_date | return_date |
+-----+-----+-----+-----+-----+
| 1            | Yes       | Africa       | 2017-06-12    | 2017-09-15  |
| 2            | Yes       | Asia         | 2018-06-12    | 2018-09-15  |
| 3            | Yes       | Southern Europe | 2019-06-12    | 2019-09-15  |
| 4            | Yes       | Africa       | 2020-06-12    | 2020-09-15  |
| 5            | Yes       | Asia         | 2020-06-12    | 2020-09-16  |
| 6            | No        | Southern Europe | 2021-06-12    | 2021-09-15  |
| 7            | Yes       | Africa       | 2021-06-12    | 2021-09-15  |
| 8            | Yes       | Asia         | 2022-06-12    | 2022-09-15  |
| 9            | No        | Southern Europe | 2022-06-12    | 2022-09-16  |
+-----+-----+-----+-----+-----+
9 rows in set (0.01 sec)
```


Question 3: Is any of our gear five years old or nearing the end of its lifespan?

By pulling our equipment ID and name columns, along with their associated onboard dates and age "years old" we can begin to paint a picture about the health of our current equipment.

Upon review of the data, we can see that we do have some equipment that's five years old (IDs 73 – 77), as well as some others nearing the five-year mark (IDs 78-83.)

We will work with Dimitros, our supplier, to properly dispose of older equipment, and possibly sell equipment nearing its end date, but that still have enough reasonable life to continue to be used safely.

```
mysql> select now();
+-----+
| now() |
+-----+
| 2023-03-04 19:17:29 |
+-----+
1 row in set (0.01 sec)
```

```
mysql> SELECT equipment_id, equipment_name, onboard_date, years_old FROM equipment WHERE equipment_id > 72;
```

equipment_id	equipment_name	onboard_date	years_old
73	Radio	2017-03-10	5
74	Rope	2017-03-10	5
75	Gloves	2017-12-12	5
76	Tent	2017-12-12	5
77	Flaregun	2017-12-12	5
78	Radio	2018-03-10	4
79	Rope	2018-03-10	4
80	Gloves	2018-03-10	4
81	Tent	2018-12-14	4
82	Flaregun	2018-12-14	4
83	Radio	2018-12-14	4
84	Rope	2019-03-11	3
85	Gloves	2019-03-11	3
86	Tent	2019-03-11	3
87	Flaregun	2019-03-11	3
88	Radio	2019-12-12	3
89	Rope	2019-12-12	3
90	Gloves	2019-12-12	3
91	Tent	2020-03-13	2
92	Flaregun	2020-03-13	2
93	Radio	2020-03-13	2
94	Rope	2020-03-13	2
95	Gloves	2020-12-15	2
96	Tent	2020-12-15	2
97	Flaregun	2021-03-10	1
98	Radio	2021-03-10	1
99	Rope	2021-12-10	1
100	Gloves	2021-12-10	1
101	Tent	2022-03-11	0
102	Flaregun	2022-03-11	0

```
30 rows in set (0.00 sec)
```


Working off Assumptions:

- ▶ When generating our data, reports we operated under many different assumptions.
- ▶ The early years had one adventure per year, later years had both guides taking one adventure / year.
- ▶ 1 Guide handles up to 4, but no less than 2 customers.
- ▶ Adventures always occur two weeks into June, and return three months later in September.
- ▶ Resupply occurs in March and December, or 3 months before and after adventures.
- ▶ Each adventure requires the same equipment, and Outland Adventures provides equipment specifically for those adventures.



Thank You!