Relatório do T2 de Infraestrutura para Gestão de Dados

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1. Definição das Consultas

Q1. Encontre o passageiro a partir do seu ID
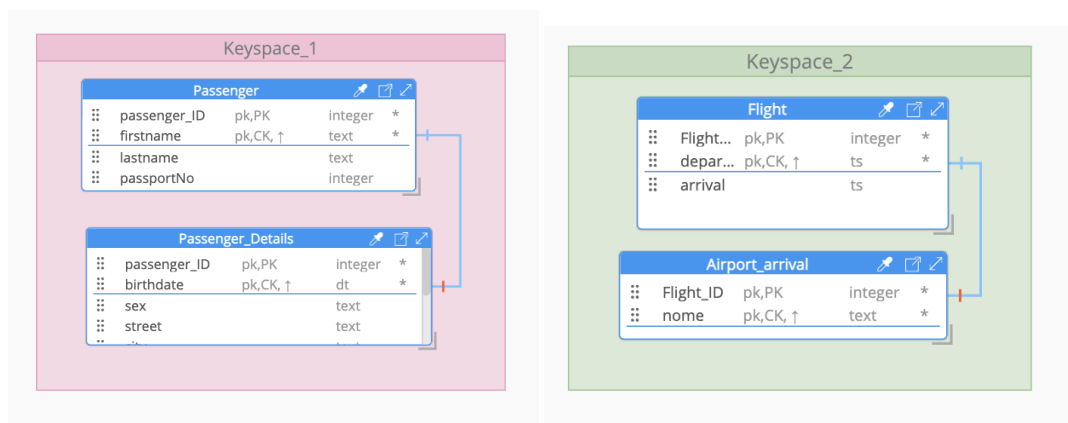
Q2. Descubra todos os detalhes do passageiro, dado o seu ID.

Q3.Encontre a passagem aerea a patir do seu ID

Q4.Qual é o nome do aereporto de chegada, dado o ID da passagem aerea.

2. Definição de Tabelas

Aqui embaixo, mostrarei para cada sequência de consultas Q1 → Q2 e Q3 → Q4 um esquema lógico não-relacional tendo por alvo o SGBD Cassandra na ferramnenta Hackolade

3. Comandos CQL DDL

Nesta secção, mostrarei o script CQL DDL que foi gerado apartir das tabelas criadas na ferramenta Hackoladde

3.1. Keyspace 1

```
CREATE KEYSPACE "keyspace_1"
  WITH REPLICATION = {
    'class' : 'SimpleStrategy',
    'replication_factor' : 1
  }
AND DURABLE_WRITES = false;

USE "keyspace_1";

CREATE TABLE "keyspace_1"."passenger" (
```

```
    "passenger_id" int,
    "firstname" text,
    "lastname" text,
    "passport_no" text,
    PRIMARY KEY ("passenger_id", "firstname")
)
WITH CLUSTERING ORDER BY ("firstname" ASC);

CREATE TABLE "keyspace_1"."passenger_details" (
    "passenger_id" int,
    "birthdate" date,
    "sex" text,
    "street" text,
    "city" text,
    "zip" text,
    "country" text,
    "email" text,
    "telefone" text,
    PRIMARY KEY ("passenger_id", "birthdate")
)
WITH CLUSTERING ORDER BY ("birthdate" ASC);
```

3.2. Keyspace 2

```
    CREATE KEYSPACE "keyspace_2"
  WITH REPLICATION = {
    'class' : 'SimpleStrategy',
    'replication_factor' : 1
  }
AND DURABLE_WRITES = false;

USE "keyspace_2";

CREATE TABLE "keyspace_2"."flight" (
    "Flight_id" int,
    "departure" timestamp,
    "arrival" timestamp,
    PRIMARY KEY ("flight_id", "departure")
)
WITH CLUSTERING ORDER BY ("departure" ASC);

CREATE TABLE "keyspace_2"."airport_arrival" (
    "flight_id" int,
    "nome" text,
    PRIMARY KEY ("Flight_ID", "nome")
)
WITH CLUSTERING ORDER BY ("nome" ASC);
```

4. Comandos CQL DML

Nesta secção, mostrarei o script CQL DML que foi gerado dentro do Oracle Sql developer,
a partir do script oferecido pelo Professor.Aqui, está o script:

4.1. Primeira Tabela(Q1)

```
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(231,'Andrew','Hill','P103241  );
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(248,'Perry','Lopez','P103258  );
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(266,'Frederic','Raphael','P10327
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(304,'Archbishop Desmond','Tutu',
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(307,'Veronica','Hurst','P103317
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(308,'Stan','Jones','P103318  );
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(314,'Jim','Ringo','P103324  );
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(316,'Morley','Safer','P103326  )
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(318,'Brad','Sullivan','P103328
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(321,'Monica','Vitti','P103331  )
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(324,'Ed','Young','P103334  );
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(337,'Christian','Metz','P103347
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(342,'Ernest','Pintoff','P103352
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(347,'Dabney','Coleman','P103357
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(356,'Milos','Forman','P103366  )
insert into keyspace_1.passenger(passenger_ID,firstname,lastname,passportNo) values(359,'Michel','Legrand','P103369
```

4.2. Segunda Tabela(Q2)

```
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(273,'18/02/78','m','Prof.-Ficker-Weg 64','Litzelsdorf','7532','GERMANY','george.chambers@mtsmobility.com','0660 6659199');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(284,'18/09/11','m','Angerzellgasse 14','Oberwart','7400','CHILE','derek.nimmo@mobistar.be','07348 41606552');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(286,'18/01/89','m','Anton-Rauch-Straße 1','Rechnitz','7471','GREECE','willie.ruff@smsmail.lmt.lv','0291 75171921');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(291,'18/11/69','m','Blasius-Hueber-Straße 97','Stadtschlaining','7400','SEYCHELLES','jim.bunning@satelindogsm.com','0400 46161262');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(296,'18/10/00','m','Brunecker Straße 96','Unterwart','7501','BRAZIL','mickey.mantle@att.net','07135 41539619');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(297,'18/05/68','m','Bürgerstraße 34','Weiden bei Rechnitz','7461','ARGENTINA','eddie.mathews@correo.movistar.net','09363 43543995');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(305,'18/09/85','m','Elisabethstraße 80','Schandorf','7472','BRAZIL','stan.jones@page.hit.net','08796 96997931');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(330,'18/01/10','m','Innstraße 98','Gitschtal','9622','BRAZIL','romolo.girolami@page.hit.net','02135 90560992');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(24,'18/08/60','w','Nordkettenstraße 19','Graz','8046','CANADA','joanne.woodward@airtelkol.com','02110 39076274');
insert into keyspace_1.Passenger_Details(passenger_ID,birthdate,sex,street,city,zip,country,email,telefone) values(32,'18/02/19','w','Trientlgasse 8','Graz','8074','UNITED STATES','jan.howard@swmsg.com','09649 59767285');
```

4.3. Terceira Tabela(Q3)

```
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142190,'2020-10-02 02:46:09','2023-11-18 10:21:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142228,'2021-01-22 04:45:40','2023-09-18 09:29:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142263,'2020-05-04 07:06:40','2023-05-18 19:36:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142271,'2021-04-20 16:06:56','2023-05-18 11:05:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142272,'2022-08-14 00:07:36','2023-02-19 07:15:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142297,'2021-05-18 20:36:14','2023-05-19 01:19:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142298,'2022-10-10 09:13:58','2023-11-19 06:24:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(139884,'2021-06-28 02:32:09','2023-12-18 12:53:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142412,'2021-12-24 22:13:14','2023-05-18 18:00:00);
insert into keyspace_2.Flight(flight_id,departure,arrival) values(142419,'2020-04-16 19:46:59','2023-05-18 07:30:00);
```

4.4. Quarta Tabela(Q4)

```
insert into keyspace_2.Airport_arrival(flight_id,nome) values(141166,'AMILCAR CABRAL DE GAOUA);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(144032,'ANIAK);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(385102,'APATAKI);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(389343,'ARBRA);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(139790,'AREA DE MATERIAL);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(640351,'ATICO);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(143407,'ATIKOKAN MUN);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(640166,'BAD PYRMONT);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(142938,'BAD SASSENDORF);
insert into keyspace_2.Airport_arrival(flight_id,nome) values(140854,'BANNING MUN);
```

5. Comandos CQL DQL

Aqui estão os os comandos CQL DQL que fazem as consultas mencionadas anteriormente no Primeiro tópico do trabalho

5.1. 1 Consulta

```
1° Consulta:

SELECT * FROM passenger
where passenger_id = 318
;
                        17:44
```

5.2. 2 Consulta

```
2° Consulta:          ∨

SELECT * FROM passenger_details
WHERE passenger_id = 330   17:47
```

5.3. 3 consulta

```
3° Consulta:          ∨

SELECT * FROM flight
WHERE flight_id = 142228
;
                        17:50
```

5.4. 4 consulta

```
4° Consulta:          ∨

SELECT nome FROM airport_arrival
WHERE flight_id = 640166
;
                        17:51
```