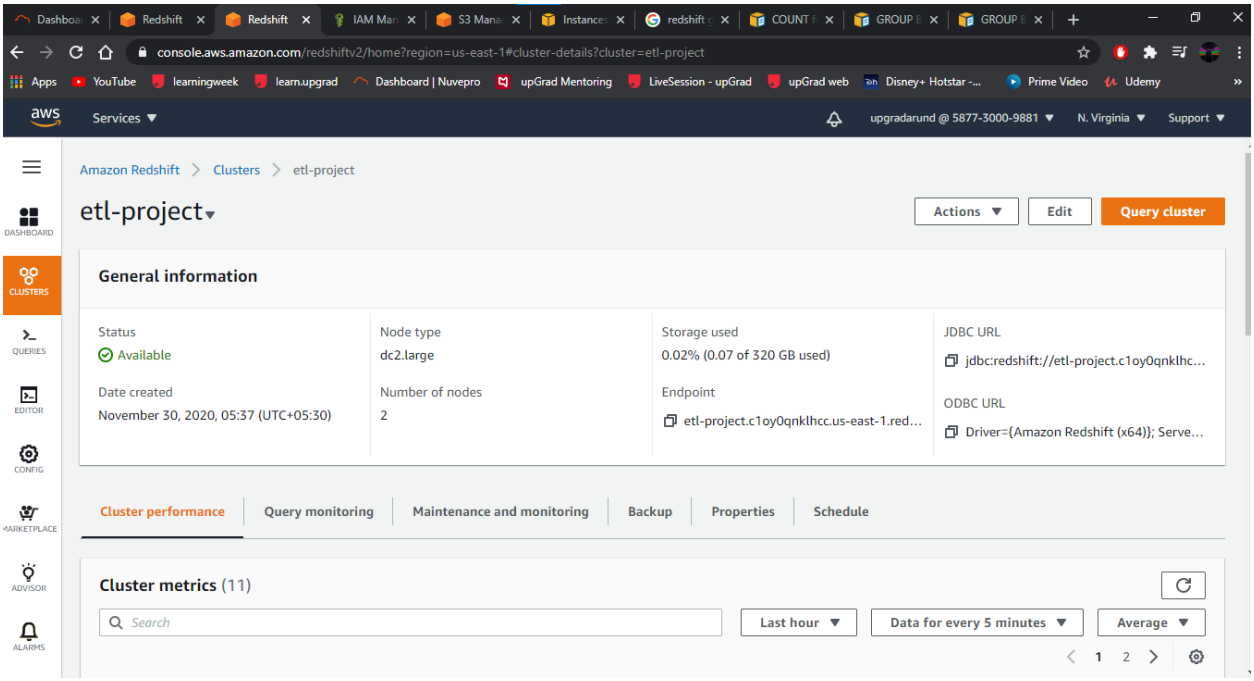
Creation of a RedShift Cluster

Screenshots of the configuration of the RedShift cluster that you have created:

<Screenshot of the type of machine used along with number of nodes>



Setting up a database in the RedShift cluster and running queries to create the dimension and fact tables

Queries to create the various dimension and fact tables with appropriate primary and foriegn keys:

<Queries>

```
create schema redshift_etl_project;


create table redshift_etl_project.dim_location(
location_id integer not null distkey sortkey,
location varchar(50),
streetname varchar(255),
street_number integer,
```

```
zipcode integer,
lat DECIMAL(10,3),
lon DECIMAL(10,3));


create table redshift_etl_project.dim_atm(
atm_id integer not null distkey sortkey,
atm_number varchar(20),
atm_manufacturer varchar(25),
location_id integer);


create table redshift_etl_project.dim_card_type(
card_type_id integer not null distkey sortkey,
card_type varchar(20));

create table redshift_etl_project.dim_date(
date_id integer not null distkey sortkey,
full_date_time timestamp,
year integer,
month varchar(20),
day int,
hour int,
weekday varchar(20));

create table redshift_etl_project.fact_atm_trans(
trans_id integer not null distkey sortkey,
atm_id integer,
location_id integer,
date_id integer,
card_type_id integer,
atm_status varchar(20),
currency varchar(20),
service varchar(10),
transaction_amount integer,
message_code varchar(255),
message_text varchar(255),
rain_3h DECIMAL(10,3),
clouds_all int,
weather_id int,
weather_main varchar(50),
weather_description varchar(255));
```

Loading data into a RedShift cluster from Amazon S3 bucket

Queries to copy the data from S3 buckets to the RedShift cluster in the appropriate tables

<Queries>

```
copy redshift_etl_project.dim_location from
's3://devilatom/dim_location/part-00000-30a9ccb8-66df-41ac-b346-890b03b1ef5e-c000.csv'
iam_role 'arn:aws:iam::587730009881:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1' CSV IGNOREHEADER 1;
```

```
copy redshift_etl_project.dim_atm from
's3://devilatom/dim_atm /part-00000-56907704-a52d-43db-bf4e-3f05119405de-c000.csv'
iam_role 'arn:aws:iam::587730009881:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1' CSV IGNOREHEADER 1;
```

```
copy redshift_etl_project.dim_card_type from
's3://devilatom/dim_card/part-00000-3d878a3c-cf0b-47ea-8112-015888e94afa-c000.csv'
iam_role 'arn:aws:iam::587730009881:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1' CSV IGNOREHEADER 1;
```

```
copy redshift_etl_project.dim_date from
's3://devilatom/dim_date/part-00000-bddf5d24-5a26-437f-82f2-e04b71a4f21f-c000.csv'
iam_role 'arn:aws:iam::587730009881:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1' CSV IGNOREHEADER 1;
```

```
copy redshift_etl_project.fact_atm_trans from
's3://devilatom/fact_atm_trans /part-00000-76fb56f0-74d6-4526-a343-b046f3433675-c000.csv'
iam_role 'arn:aws:iam::587730009881:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1' CSV IGNOREHEADER 1;
```