

Lab 3

During this lab I got a lot of new knowledge/experience, I understand queues way better than I did before and how they work and they are used for messaging data. I had some problems in the beginning to get a grasp on the different databases so I think that's where I put most of the time just to make it work but I really enjoyed the feeling I got when everything worked as I wanted it to. I think SQL was harder than the NoSQL(mongoDB).

I used one WebRole for the frontend, two WorkerRoles for the backend and four queues to message the data.

The lab starts at Default where the user choose to either continue without including hotel reservation or checks the box for both flight and hotel reservation, when that is done the user gets to FRS(Flight Reservation Service) where the user can see all the different flights such as airport code and airport city and below that the user chooses from where and to where they would like to travel by checking the boxes for their choice, they also enter how many travellers and customer name. From FRS the user gets to HRS(Hotel Reservation Service) if the box was checked on the default page, in HRS the user enter the number of people that would like to stay at the hotel but also number of nights, if there is any seniors(for discount) and if they would like to rent a single or double room. When the HRS process is done the next step will be the PS(Payment Service) where the user can see the price by clicking "get offer" and by entering card number and card holder and pressing "Pay" the users payment is successful and that will show at the last page with a text "Thank you for your booking!".

From the last page there is a button that say "View Reports" and that's to view the reports saved in the database, both SQL and NoSQL.

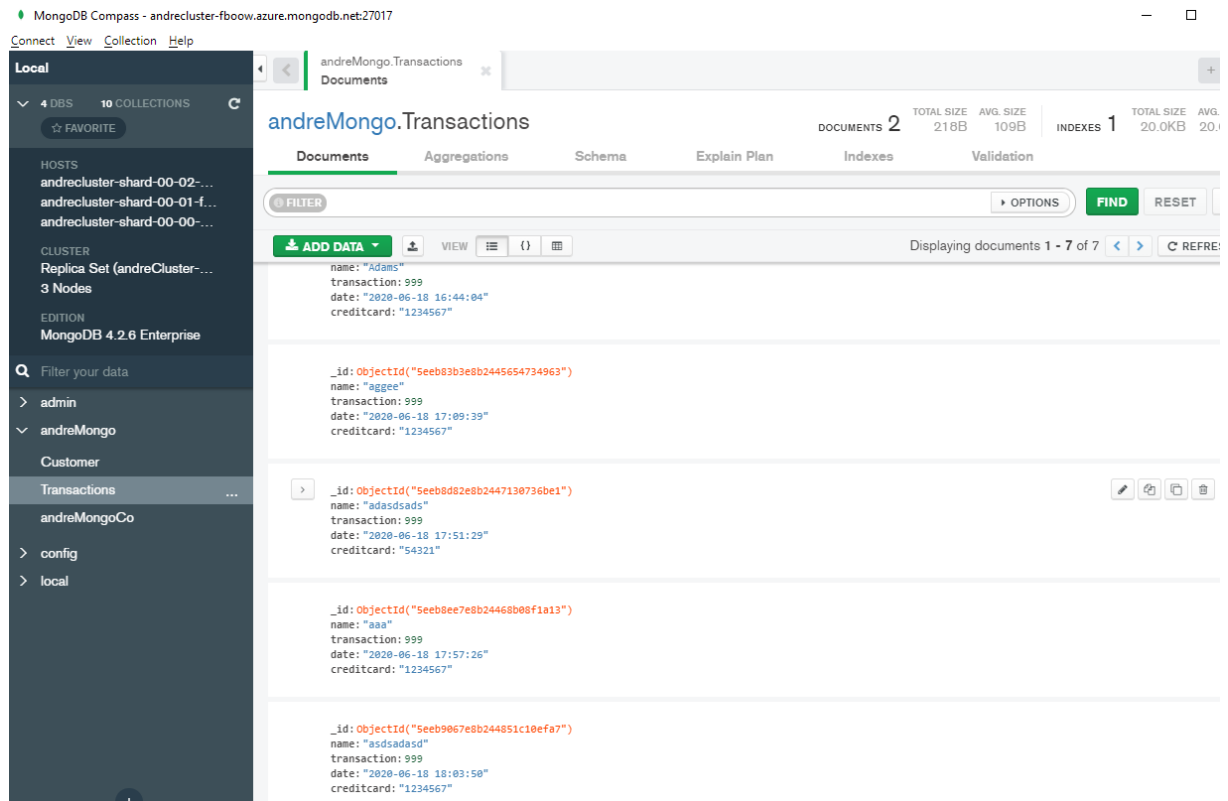
The databases I used was MongoDB and the Azure SQL Server. For MongoDB I created a cluster and took that connectionString and pasted it in the MongoDB compass, after that I created the collections(tables) needed. For the SQL server I created all the tables and added all the needed columns.

NoSQL is used in Payment.aspx for Customer and Transaction information but also in both WorkerRoles, in WorkerRoleFRS to insert information to "Flights" and in WorkerRoleHRS to insert information to "Bookings".

SQL is used in WorkerRoleFRS to get the longitude and latitude for the different Airports to be able to calculate the price. Here it also inserts all the information to the table "Flights".

I hope I've done enough, it was a hard task but to be honest now when I'm finished it feels really good and I really feel that I learned a lot during it.

My NoSQL database, I used MongoDB for this part.



My SQL database, I created and used the local database.

