Databases
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Research Assignment
AWS (Amazon Elastic Beanstalk)

Submitted by: Abu Huraira (a.huraira@innopolis.university)

Introduction:

AWS (Amazon Elastic Beanstalk) is a Platform as a Service (PaaS) provider that offers a variety of data stores to its users. These data stores include:

1. **Amazon RDS:** Amazon Relational Database Service (RDS) is a fully-managed database service that makes it easy to set up, operate, and scale a relational database in the cloud. Amazon RDS supports multiple database engines, including Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle Database, and SQL Server.

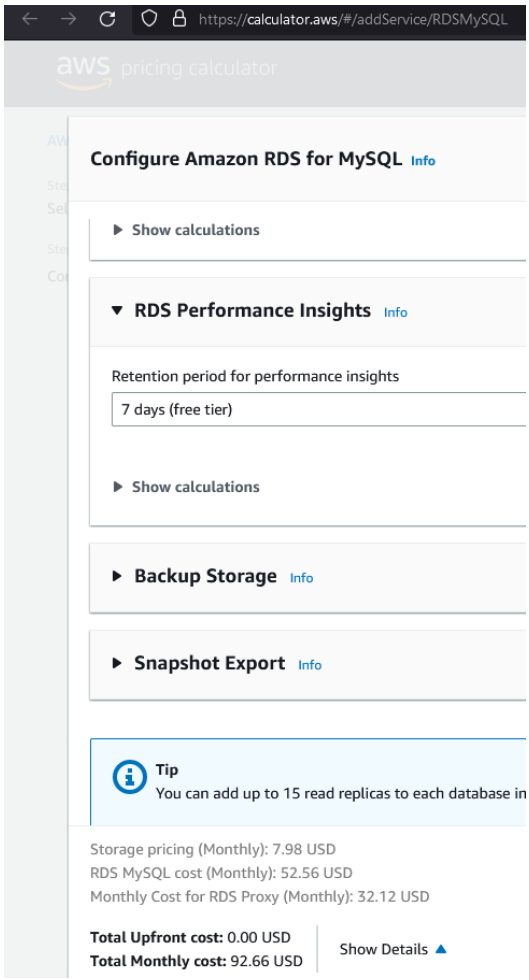
2. **Amazon DynamoDB:** Amazon DynamoDB is a fully-managed NoSQL database service that provides fast and predictable performance with seamless scalability. DynamoDB supports both document and key-value data models and automatically scales throughput capacity to meet the needs of any application.

Performance and Cost Analysis:

In terms of performance, Amazon RDS is a good choice for applications that require a relational database, while Amazon DynamoDB is a good choice for applications that require a flexible and scalable NoSQL database. Both data stores offer high availability, durability, and security.

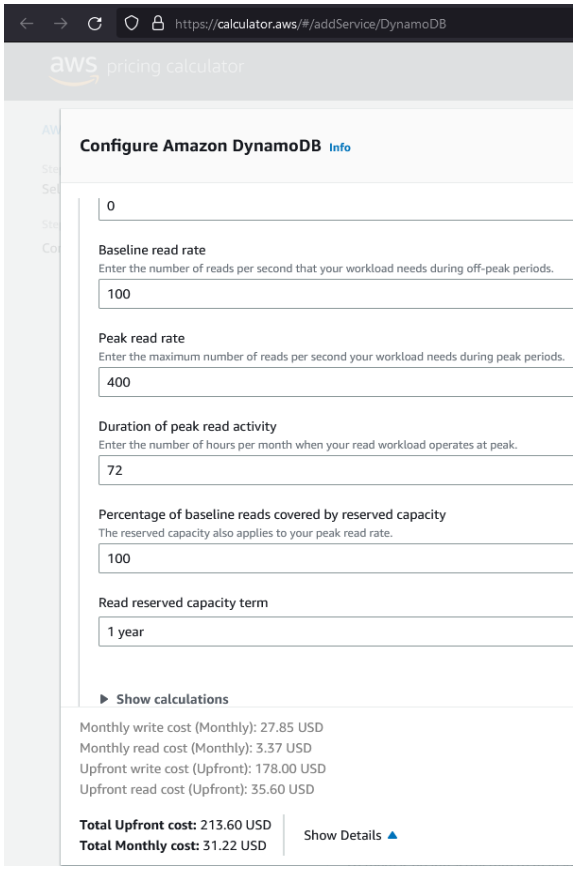
For cost analysis, let's consider a hypothetical application scenario for relatively small application. We can get such result from AWS.Calculator

1. **Amazon RDS**:



Monthly cost = 92.66 USD. Thus, yearly cost = $92.66 x 12 = $1111.92 (approximately)

2. **Amazon DynamoDB:** 👇



From aws calculator, we can see monthly cost = 31.22 USD. Thus, yearly cost = 31.22 x 12 = 374.24 USD.