**Database System Conceptual, Physical, and Implementation**

Student’s name

Institutional affiliation

**Table of Contents**

[1 Task 1 - Cloud Database Platforms 2](#_Toc67210640)

[1.1 Amazon DocumentDB - (student’s name) 2](#_Toc67210641)

[1.2 Amazon RDS for MySQL - (student’s name) 3](#_Toc67210642)

[4 Task 4 – Data Privacy Policies 4](#_Toc67210643)

[4.1 European General Data protection Regulation (GDPR) law - (student’s name) 4](#_Toc67210644)

# **1 Task 1 - Cloud Database Platforms**

## **Amazon DocumentDB - (student’s name)**

Amazon web services is one the most popular cloud platforms that offers database platforms that supports different types of databases such as SQL and NoSQL.

**The types of data that can be stored**

Amazon DocumentDB is a non-relational database that stored data in document format. Data is stored in JSON format. Data relating to an entity is stored as document in a collection. JSON is the standard format for exchanging data using modern APIs. Developers are more productive since no translation required during development (Amazon, n.d).

**Type of supported database**

Amazon DocumentDB is a mondodb compatible platform that stores records in form of documents. It's a MongoDB-compatible document database service that's fast, scalable, highly accessible, and completely managed. It’s a non-relational database service designed for easier scalability, higher performance and mission-critical workloads.

**Number of transactions processed per month**

Amazon DocumentDB has double the throughput of normal mongoDB database managed services because it separate storage and computing such that they can scale independently. This database platform handles millions of requests per second. It also support fault torelant, distributed and scalable database cluster

**Support for data analytic service**

Amazon DocumentDB support data storage, query operations, JSON data indexing but does not support analytical operations.

## **1.2 Amazon RDS for MySQL - (student’s name)**

MySQL is an open-source relational database that stores records in a two dimensional grid refered to us table or relation. Amazon Web services provide an online database platform that support deployment of database on the cloud with ease and at lower cost.

**The types of data that can be stored**

Amazon RDS cloud database platform stores data records in relations. Data that can be stored included textual, dates, numerical values etc. Each record represents an entity where a collection of similar entities is stored in the same relation.

**Types of database supported**

Amazon RDS platform support MySQL database that stores records in relations that allow a relationship to be established between records. MySQL is the most popular relational database that is optimized and scaled in cloud platform

**Number of transactions processed per month**

Amazon RDS for MySQL provide fast and predictable storage that is cost effective for small and medium-sized workloads. Amazon (n.d) affirms that the platform process up to 40,000 transactions per second and as storage requirements grow, the storage can easily be scaled with zero downtime.

**Support for data analytic service**

Amazon RDS provide tools for motoring and analysis of database metrics at no additional cost. Amazon CloudWatch enables view of key operational metrics and resource utilization in an easier to understand management console.

# **4 Task 4 – Data Privacy Policies**

## **4.1 European General Data protection Regulation (GDPR) law - (student’s name)**

Comprehensive data protection laws are critical for safeguarding human rights, including the right to privacy, as well as a slew of other liberties that rely on our ability to choose how and with whom we share personal information. According to Human Right Watch (2018), the General Data Protection Regulation (GDPR) of the European Union is one of the most powerful and comprehensive efforts in the world to regulate the collection and use of personal data by governments and the private sector. The European Union passed it in 2016 and it entered into effect on May 25, 2018, across the European Union’s 28 member states.

The European Union's General Data Protection Regulation (GDPR) is a new set of regulations aimed at strengthening personal data safeguards and ensuring consistency in the EU. Everything a person does online in the digital age creates or implicates data that can reveal a great deal about their personal lives (Human Right Watch, 2018). The GDPR introduces new safeguards for individuals' personal data, as well as their privacy and other human rights.

The EU regulation mandates that all public and private entities that process personal data of EU citizens implement certain safeguards and reveal more information about the data they collect and how they will use and share it. It also gives people and the data they give a corporation or government agency a lot more privacy protections. For example; Before collecting or using a person's data, businesses must obtain their consent and apply unique protections to sensitive information. Additionally, online identifiers and location data must be treated as personal data by businesses and must explain how they use, share, and store a person's personal data.

References

Amazon RDS on VMware. (n.d.). Retrieved from https://aws.amazon.com/rds/vmware/?nc2=h\_ql\_prod\_db\_rdsvm

The EU general data protection regulation. (2018, June 6). Retrieved from https://www.hrw.org/news/2018/06/06/eu-general-data-protection-regulation

Amazon DocumentDB (with MongoDB compatibility). (n.d.). Retrieved from https://aws.amazon.com/documentdb/?nc2=h\_ql\_prod\_db\_doc