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**Question 1**

Amazon’s Simple Storage Service (S3) is an object storage service; objects are stored as key/value pairs. Objects can be added or read from S3 either through the web console or through RESTful API.

Read the following documentation of inserting an object into an S3 bucket

<https://docs.aws.amazon.com/AmazonS3/latest/API/API_PutObject.html>

and answer the following questions

1. What content type is supported by S3 in the put object operation?

* All standard MIME types

1. How does S3 ensure payload integrity viz. the object that is uploaded, especially large object, has not been corrupted.

* S3 uses the context-MD5 header to check the object against the provided MD5-value

1. What other algorithms (wrt b) does S3 support? How are these algorithms specified?

* CRC32, CRC32C, SHA1, SHA256

1. How does S3 ensure content confidentiality?

* Server-side Encryption. Message is not encrypted during transit but when at rest.

1. What strategy does this operation use to support S3 features (eg. encryption, storage classes, etc.) when an object is uploaded?

In your opinion, how are new S3 features supported by this operation?

* Requestor will be charged for the request
* Storage class on where the objects are stored

1. How does the put operation support caching?

* Standard cache control parameters

1. How does the operation ensure that all the required parameters (eg. bucket name, encryption key, credentials, etc.) are correct be committing to the put operation?

* Expect: 100-continue to be be used for validation.

1. What are the main differences between this operation (PutObject) and PostObject (<https://docs.aws.amazon.com/AmazonS3/latest/API/RESTObjectPOST.html>)

* POST can only support context type multipart/form-data while PUT can support any context type.
* POST can have multiple objects while PUT can only have one object.

1. S3 charges includes egress, viz. amount of data transferred out from a S3 bucket. If your server is using S3 for data storage, how do you reduce your S3 charges?

* Configure using cache and enable CORS

**Submission**

Copy this Word document to your repository and commit it.

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