## Warm-up Questions

1. I would explain to my client the benefits of using HTTPS over HTTP. The advantages are as follows:-
   1. Protecting Your User's Privacy
   2. It will be one of the critical factors for Search Engine Ranking
   3. It Protects Your Brand
   4. It Protects Your Revenue (From Proxies)
   5. It has iOS 9+/Android 5+ API Compatibility
   6. All the browsers mark HTTP as insecure and users may not feel good accessing it
2. The apparent simplicity of Docker’s latest tag masks a quagmire of possible issues. You’ll encounter them both as an image author and consumer. The problems stem from the semantic inconsistency of the tag: while it sounds dynamic, it’s nothing more than a static tag assigned by Docker in the absence of a user-supplied value.

You should pin against specific image versions wherever possible. This will help you avoid breaking changes and ambiguous third-party tool behaviors. As an image author, try to provide semantic release versions and make it clear how your project treats the latest. This will help prospective users assess how to reference your image.

1. I would store the environment variables securely and access them in my code by storing them in the azure key vault or aws kms or gcp kms. As Secure key management is essential to protect data in the cloud this would be the best solution possible.

| Infrastructure Choices at a Glance | | |
| --- | --- | --- |
|  | Upside | Points to consider |
| Self-  managed | Complete control of all aspects of infrastructure Data maintained onsite for higher security Flexibility to match specific hardware to each application based on computing requirements | Management costs Recurring fees for facilities, warranties, service contracts, and electricity Space limitations as demands grow and servers are added |
| Hosted | No acquisition costs Offload equipment management to service provider Highly scalable offering the flexibility to quickly meet new demands as they arise | Extra effort required to secure data Performance and service availability can vary Provider longevity - what happens if they go out of business? |