1. 
2. Following is the quick overview of what we will be covering.
3. Text

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   1. What is Hazelcast and what is its usages?
   2. What are the primary Data Structures in Hazelcast & basic use cases of it?
   3. **Efficient Use of the Network**: As Hazelcast is distributed technology. So efficient use of network is important.
   4. **Monitoring**: How to monitor our Hazelcast Cluster.
4. **So, what is Hazelcast?**
   1. **Cashing**:
      1. Firstly, it is **cache technology**. That is a **distributed cache**.
      2. Every client has access to the cache data. No matter where they reside.  
         It could be on a different server or on a different rack in a data center or in a different data center somewhere in another country.
   2. **Clustering**:
      1. Hazelcast is a clustering technology which means we can easily **scale out** to meet the demand **by starting off additional nodes**, which will **automatically join** the cluster.
   3. **No-SQL Key/Value Store**:
      1. Hazelcast can be used **as a No-SQL key/value data source**.
   4. **Application Scaling:**
      1. Hazelcast allows us to easily scale out our application by adding new nodes.
      2. The new nodes add the memory & CPU resources and make them available to the **Hazelcast** cluster for utilization.
   5. **Messaging**:
      1. **Hazelcast** has a messaging system built into it which support **publish/subscribe** & **producer/consumer models** all in memory so super fast.
   6. **Data Grid**:
      1. All of these features put together make it useful as a **Data Grid**.
      2. This is what allows us to create dynamic, fast, scalable & highly available & performant app.
5. **Who is using Hazelcast**?
   1. 
6. **Hazelcast is available in two editions**.
   1. A standard Open-Source Edition:
      1. 
      2. This edition is generally referred to as Hazelcast in their Documentation.
   2. Commercially Licensed Enterprise Edition:
      1. Background pattern

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      2. This edition is generally referred to as Enterprise Hazelcast in their Documentation.
      3. This edition provides some additional features which may be required for an enterprise app such as **Security**.
      4. It also provides the ability to synchronize two clusters which are generally distributed geographically using WAN Replication.
      5. Another feature is to cluster the session data from your Tomcat Web Server.  
         So, you can easily create a cluster of these Tomcat Servers. No matter which one your request hits, your session info will be available on it.  
         So, let’s look at hazel cast cluster.
7. **Hazelcast Cluster**:  
   Diagram

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   1. It is made of nodes and clients.
   2. Nodes represented within the cloud in the diagram make their(nodes) memory & CPU resources available to the cluster.
   3. Clients (which could be another server process, Desktop App or Mobile App) can access the cluster to use it as they wish.
   4. Clients are not members of the cluster. They can connect to the cluster but don’t provide memory & CPU resources to the cluster.
8. Text

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