Topics

* Frontend web framework

1. JQuery Introduction
2. What is Ajax? What is JSONP?
3. What is SPA(Single Page Application)? How’s architecture?
4. A SPA framework AngularJS introduction

* Web communication?

1. What is web-socket? What difference with comet?

Ref: http://blog.sina.com.cn/s/blog\_6fc2c2850100uruh.html

* Deployment

1. What is CentOS ? What is difference between others OS

Ref: http://mitblog.pixnet.net/blog/post/41037058-10-%E5%A5%97-linux-%E4%BD%9C%E6%A5%AD%E7%B3%BB%E7%B5%B1%E7%9A%84%E6%AF%94%E8%BC%83%E3%80%81ubuntu-vs-fedora-vs-cen

1. What is DNS forward/reverse? How to make DNS load balance?
2. What is Nginx? What difference between Apache and Nginx?
3. What is Jetty? What difference between Tomcat and Jetty?
4. How to construct load balance Nginx as proxy server with Jetty?
5. Demo a simple service application build as WAR file to deploy to Jetty, show the result in browser

* Backend web framework

1. Java-based web framework introduction (Play or SpringMVC)
2. What is RESTful? Write a demo to show that (Jersey or CXF)

* RDBMS

1. What difference between MySQL and Postgresql? Which concurrency better? What is connection pool?
2. Java ORM Hibernate introduction

* Big-Data (Ref: http://db-engines.com/en/ranking)

1. Big-Data ecosystem introduction

17. Hadoop introduction

18. Hive introduction (Row-Based DB)

19. HBase introduction (Column-Based DB, Big-Table)

20. Cassandra introduction (Column-Based DB, Big-Table)

21. MogoDB introduction (Document-Based)

22. Zookeeper introduction

1. Sqoop introduction

* Map-Reduce

1. Map-Reduce introduction. How is design pattern?
2. Spark introduction
3. Mahout introduction

* Message Queue

1. Kafka introduction
2. Flume introduction

* Visualization

1. R introduction
2. Others, http://blog.profitbricks.com/39-data-visualization-tools-for-big-data/

* Java Project Build

1. Maven vs Gradle?

* Virtualization (long-term)

1. OpenStack introduction

Others ……… low priority

1. Plug-ins
2. Drools
3. Memory cache server
4. Authentication
5. What difference between MPP and MapReduce