Transcript name: MapReduce – Part 5 – Fault Tolerance

English
Now that you know what a successful MapReduce job looks like, let us see what happens when something goes wrong. The first kind of failure is a failure of the task, which could be due to a bug in the code of your map task or reduce task. The JVM tells the TaskTracker and Hadoop counts this as a failed attempt and can start up a new task. What if it hangs rather than fails? That is detected too and the JobTracker can run your task again on a different machine in case it was a hardware problem. If it continues to fail on each new attempt, Hadoop will fail the job altogether. The next kind of failure is a failure of the TaskTracker itself. The JobTracker will know because it is expecting a heartbeat. If it doesn't get a heartbeat, it removes that TaskTracker from the TaskTracker pool. Finally, what if the JobTracker fails? There is only one JobTracker. If it fails, your job is failed. This lesson is continued in the next video.