Case study for TDD java Session

This assignment is to develop a few functionalities of a data backup application using TDD with JUNIT4

The user stories to be implemented are as follows

- 1. As a backup administrator, I want to be able to take the backup of a file or directory so that the data loss can be avoided
- 2. As a backup administrator, I want to be able to take the backup in three different modes as
 - a. Normal backup
 - b. Differential back up
 - c. Incremental backup

So that the backup is available in the required efficient manner.

The details of three backup modes are as under

- a. **Normal Backup**: In this mode the files and or directories will be simply backed up without considering the existence of earlier copies of the same. This is blind backup.
- b. **Differential Backup**: In this mode the files and or directories which are not available at backup location only will be backed up.
- c. **Incremental backup**: In this mode the time-stamp of the backed up files/directories will be compared with current files/directories and the files/directories with latest time-stamp will be kept in backup.
- 3. Development setup: Windows XP with JDK1.5/1.6, Eclipse-Jee-Indigo, CVS Server, unit 4.9, Cruise-Control 2.0.1, Apache Ant, RDBMS server oracle9/10 or MySql5.
- 4. Steps for assignment
- 5. Write the test class in test package with a test method to exercise the BackupManager class for testing the file backup.
- 6. Run the test..let it fail first time..The red bar will be shown
- 7. Write the fake implementation code in the BackupManager class.(e.g. sysout)
- 8. Run the test to see the green bar.
- 9. Write the actual code to backup the file and run the test again to see the green bar.
- 10. Write the test to verify the file backup done earlier and each time make the green bar displayed.
- 11. Iterate through the steps similar to above to incrementally develop the above two user stories.
