Maven Repositories

Maven central is the biggest repository available...

We can setup repo for maven to look out for dependency either by modifying repository element in setting.xml or pom.xml.

Repository element has layout tag.. It can have legacy as value for old repo. Snapshots and releases in repository element take element of repository policy.

updatePolicy for repository policy has always value for snapshots.
When the artifact is loaded we have checksum of repo policy as verification.

Maven Mirror:

With Repositories you specify from which locations you want to *download* certain artifacts, such as dependencies and maven-plugins. Repositories can be declared inside a project, which means that if you have your own custom repositories, those sharing your project easily get the right settings out of the box. However, you may want to use an alternative mirror for a particular repository without changing the project files.

> To configure a mirror of a given repository, you provide it in your settings file (${user.home}/.m2/settings.xml), giving the new repository its own id and url, and specify the mirrorOf setting that is the ID of the repository you are using a mirror of. For example, the ID of the main Maven Central repository included by default is central, so to use the different mirror instance, you would configure the following:

1. <settings>
2. ...
3.   <mirrors>
4.   <mirror>
5.   <id>other-mirror</id>
6.   <name>Other Mirror Repository</name>
7.   <url>https://other-mirror.repo.other-company.com/maven2</url>
8.   <mirrorOf>central</mirrorOf>
9.   </mirror>
10.   </mirrors>
11. ...
12. </settings>

> Note that there can be at most one mirror for a given repository. In other words, you cannot map a single repository to a group of mirrors that all define the same <mirrorOf> value. Maven will not aggregate the mirrors but simply picks the first match. If you want to provide a combined view of several repositories, use a repository manager instead.

Maven mirror redirects the mentioned mirror (central) in maven default settings to the new url.
We have to mention the mirror in (${user.home}/.m2/settings.xml).

Following are mirrors of central:

```xml
<repository-metadata>
<version>1.0.0</version>
<url>http://repo1.maven.org/maven2/</url>
<id>central</id>
<name>Maven Central</name>
<layout>maven2</layout>
<policy>release</policy>
<mirrors>
<mirror>
<id>google-maven-central</id>
<url>https://maven-central.storage-download.googleapis.com/maven2/</url>
</mirror>
<mirror>
<id>google-maven-central-eu</id>
<url>https://maven-central-eu.storage-download.googleapis.com/maven2/</url>
</mirror>
<mirror>
<id>google-maven-central-ap</id>
<url>https://maven-central-asia.storage-download.googleapis.com/maven2/</url>
</mirror>
<!--  mirror>
    <id>cica.es</id>
    <url>http://ftp.cica.es/mirrors/maven2</url>
  </mirror>
  <mirror>
   <id>repo.exist.com</id>
   <url>http://repo.exist.com/maven2</url>
  </mirror>
  <mirror>
   <id>ibiblio.org</id>
   <url>http://mirrors.ibiblio.org/pub/mirrors/maven2</url>
  </mirror>
  <mirror>
   <id>ibiblio.net</id>
   <url>http://www.ibiblio.net/pub/packages/maven2</url>
  </mirror>
  <mirror>
   <id>mirror.netcologne.de</id>
```

```
    <url>http://mirror.netcologne.de/maven2</url>
   </mirror>
   <mirror>
     <id>uk.maven.org</id>
     <url>http://uk.maven.org/maven2</url>
   </mirror  -->
</mirrors>
</repository-metadata>
```

We can change the url of repo depending on the location.