

Task 1.1

Technology	Version
java	1.8
hazelcast	3.6.2
spring-boot	1.5.2
logback	1.1.2
aciviti	5.20.0
pdfbox	2.0.0
mockito-core	1.10.19
springframework-retry	1.1.2
flyway-core	4.0.1
jackson-mapper-asl	1.9.13
guava	18.0
json-path-assert	0.8.1
commons-io	2.4
tika-core	1.9
jsoup	1.7.3
gson	2.3.1
commons-lang3	3.3.2

Task 1.2

For the development of this software has been used mainly the Spring Framework. Spring Framework aims at easier development using POJO-based programming methos. Moreover, it very well-designed framework and pretty light with a API which provides the way to develop apps using POJO. At last, its full organized with multiply packets and classes for whatever you need to do.

- Lightweight
- Well-Designed
- Fully Organized
- Multiply Packets and Classes

Task 1.3

In order to save the resources we want and to implement the cache API we see that it is used the hazelcast.HazelCast as we know is open source in-memory data grid based on Java.Alternative software that can be used is :

- 1.MongoDB
- 2.Redis
- 3.CouchDB
- 4.RethinkDB
- 5.Cloudify
- 6.H2 Database Engine
- 7.memcached
- 8.Cosmos DB
- 9.CouchBase
- 10.CockroachDB

Task 1.4

After cloning the project from github we execute the following command: mvn install in order to compile the whole project.To run the project we fix with phpmyadmin and add another user with full privileges.After all that we just run the cms jar file.I included the log file from the start of the server(file Start_log.txt)

Task 1.5

For this task i used Eclipse-IDE in order to run the server and the client to run the test.I run the test through the IDE because it was lot easier than command-line execution.I managed successfully to run the test.

Task 2.2

I made a simple mailService with two servlets.The first (Demo.java) loads the html form for the user to enter properly the elements that are required to send the mail.Then After that i used JavaMail API to send mails through a

account that i created. After that the second servlet loads a confirmation message and you can also redirect back to the mail service.

You can run the project with IDE and just use the Demo.java file to start from there the execution.

Task 3.1

For the caching or other features you can use multithread programming in order to achieve what you want but more fast so that the clients can be served a lot more convenient.

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