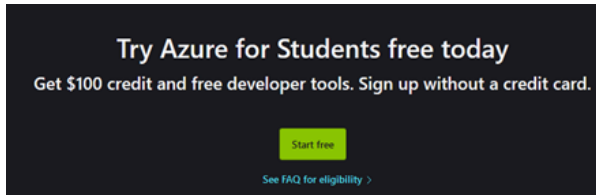


## Here is a selection of frequently asked questions (FAQ) for cs7is3 Assignment 1.

### How do I create my (free) Virtual Machine

We use Microsoft's 'Azure for Students' free service. Click on the link below to get started (use your TCD login credentials).



### What should I do with the Azure instance?

Once you have created and connected to the Azure instance, you should upload your entire project (including source code & cranfield dataset & evaluation tool) to the server. Additionally you need to draft a readme file which provides the instructions (linux command) of both compiling the java project and executing evaluation.

### Is maven a must?

No. You can also package it into a jar and use it in the project. However if the code is updated later, all imported jars must be updated. Maven can solve the problem mentioned above.

### What JDK version should I use in the assignment?

There is no limit for the JDK version. You could use whatever you are comfortable with. Apache Lucene runs on Java 7 or greater, Java 8 is verified to be compatible and may bring some performance improvements. It is also recommended to always use the latest update version of your Java VM, because bugs may affect Lucene. With all Java versions it is strongly recommended to not use experimental -XX JVM options.

### What should I include in the submission?

For submission, you need to upload: 1. A 2 page report which elaborates your project.

### Can I use Python instead of Java?

No! Unfortunately, you are restricted to using Java. This ensures a level playing field and it means that the Tutorial Assistants don't have to dive into C#, C++, Python, perl etc when correcting each submission.

### **Where can I download the Cranfield 2 Dataset?**

Normally, the Cranfield 2 dataset can be downloaded from: -

[http://ir.dcs.gla.ac.uk/resources/test\\_collections/cran/](http://ir.dcs.gla.ac.uk/resources/test_collections/cran/)

However, the QRELS file in the above download is not in the correct format for compatibility with `trev_eval`. To download the same dataset, but with a 'corrected' QRELS file (QRElsCorrectedforTRECEval), go to this link: -

<https://drive.google.com/drive/folders/1W7Sey6hJJl8nemj1pmRUnnDoXXEZuk1O?usp=sharing>

### **Where can I find the basic example scripts that we used in the Lucene Tutorial**

These scripts are a good starting point for your assignment 1.

<https://github.com/ColinDaly75/cs7is3-lucene-tutorial-examples>

These examples include: -

- example1-create-index
- example2-addDocument
- example3-query
- example4-interactive
- example5-tfidf

### **How do I install maven?**

As root user, just type: -

```
apt-get install maven
```

(or 'sudo apt-get install maven' depending on who you've logged in as)

**How do I deal with the disparity between the numbering of the Abstract ID field (.I) in the `cran.qry` file and the Query ID number in the `QRElsCorrectedforTRECEval` file.**

Some have noted the absence of correlation between the ID numbers in the cran.qry and QRelsCorrectedforTRECeval files.

- The QueryIDs in the QRelsCorrectedforTRECeval file are numbered 1 through 225.
- The Abstract IDs in the cran.qry file are non-consecutive and numbered 001 through 365

Convert 001 to 365 in the cran.qry file (.l) by position: 001 --> 1, 002 --> 2, 004 --> 3, ... 365 --> 225. In other words, a sequential reading of the ID's in the cran.qry file will directly match the Query IDs in the QRelsCorrectedforTRECeval. This will be discussed in the lab.

### **Where can I download trec\_eval?**

The only official download location for trec\_eval is [https://trec.nist.gov/trec\\_eval/](https://trec.nist.gov/trec_eval/)

(from linux, just execute wget [https://trec.nist.gov/trec\\_eval/trec\\_eval\\_latest.tar.gz](https://trec.nist.gov/trec_eval/trec_eval_latest.tar.gz) )

### **Where can I find a tutorial about trec\_eval?**

[http://www.rafaelglater.com/en/post/learn-how-to-use-trec\\_eval-to-evaluate-your-information-retrieval-system](http://www.rafaelglater.com/en/post/learn-how-to-use-trec_eval-to-evaluate-your-information-retrieval-system)

### **How do I access the ACM Digital Library**

Navigate to <https://dl-acm-org.elib.tcd.ie/> . You will be prompted for your student username and password.

### **How do I submit the assignment?**

This is through Blackboard. You will need to demo your system in order to receive a mark in the lab between Nov 1st and 22nd Nov.

### **Does the report's 2-page limit include the bibliography?**

No, the bibliography does not count. You can submit ten pages of bibliographic information if you wish!