

# Assignment 2

## Document Search Engine

Create a simple CRUD app that interacts with a database. Use your favorite backend language to create one yourself.

### Problem Statement:

A client wants to implement a Document Search Engine (Clone of Google Search Engine) where a user can search for a document. i.e. in a search bar, user will type a keyword say "information security", as a result user can see a list of all documents of all type related with "information security" in decreasing order of creation date.

Other Requirement:

- A user can be able to download any document from the list.
- A user will have an advanced search option. i.e. user can filter out the type of document, author, subject, creation date, etc.
- A user will be given one web page where a user can do a CRUD operation of a document and its metadata.
- A document can be in the form of an image, doc, docx, ppt, pdf, etc.
- UI must be very clean and simple and it must be responsive.
- A List must be in the form of card-ui and there must be pagination at server and client side.

### Future Operations:

- Apply authentication and authorization mechanism (Only authorized user can be able to perform a CRUD operation on a document)
- Implement an analytics like
  - How many times a particular keyword is searched
  - How many times each document is downloaded
  - The counter of each types of files in the directory, etc.

### Notes:

1. These future operations can be asked in your external examination so while designing the flow and database you have to consider these features however implementation is not necessary.
2. Take a backup of database and your project in every lab or use a subversion/github.
3. In every lab there will be an assessment.

## Schedule

**Week1:** Write a requirement for document search engine.

**Week2:** For add/update/delete/select a document and implement Front-end design by using AJAX.

**Week3:** Testing and evaluation of complete application.