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Bscs7 B

AP Assignment #1

# Open Source Software

Typo3 (version 10)

# Requirements

* It requires a web server, PHP and a database system.
* It requires a web server which can run PHP (e.g. Apache, Nginx or IIS).
* It 9 requires at least PHP 7.2.x
* It can be used with a great many database systems (e.g. MySQL or Postgres). If you use MySQL, you will need to install at least MySQL 5.5. and maximum MySQL 5.7
* If you use an Apache web server, the module mod\_rewrite must be activated. Certain PHP extensions are necessary, others recommended. You possibly want to adjust the memory limit; see below.
* If you want TYPO3 to automatically carry out image processing – for example scaling or cropping – you will need GraphicsMagick (version 1.3 or newer) or ImageMagick (version 6 or newer) installed on the server. (GraphicsMagick should be prefered.)

# Installation & Configuration

* Open typo3 downloaded zip folder on your server (I used wamp server)
* Then you need to create a empty file named “**FIRST\_INSTALL” in the your root directory.**
* **Then go back to localhost/typo3 (in my case) and refresh then click continue**
* **Then enter default server credentials to create a database connection**
* **Then in next step select a existing empty database or create a new one**
* **And you set the site name of your desire and click continue**
* **Now Installation is completed and then click open backend**
* **After that login to typo 3 and start using it.**

# User’s Perspective

## Simple Content Editing

Adding text, images or multimedia is super easy with TYPO3 once the templates have been setup and it is ready for content. The text editor has all the options you need to format your text, and is similar to what you would find in a text processing software like Word or email, and that familiarity means there is no need to figure out what each icon means.

## Simple File Management

Managing files with TYPO3 is very similar to how you would organize your files on your own computer. Through the Filelist module, you can create folders for each type of file, or for different sections of your site, and then upload your files onto those folders.

## Friendly Interface For All User Levels

The backend of TYPO3 is scalable to control what different users have access to. For example, a content editor might only find the need to access the pages, the filelist module, and being able to edit content on the pages.

## There’s An Extension For That

Contact forms, calendars, blogs and many other extra functions can be added to your website by installing extensions. There are over a thousand extensions available for TYPO3, for free!

# Database Structure & Coding Structure

The database tables used by TYPO3 CMS can be divided into two rough categories:

* Tables that are used by the system internally and are invisible to backend users (eg. be\_sessions, sys\_registry, cache related tables). There are often dedicated PHP API’s in the core extension to manage entries of these tables, for instance the [Cache framework API](https://docs.typo3.org/m/typo3/reference-coreapi/master/en-us/ApiOverview/CachingFramework/Index.html#caching).
* Tables that can be managed via the TYPO3 CMS backend, are shown in the List module and can be edited using [FormEngine](https://docs.typo3.org/m/typo3/reference-coreapi/master/en-us/ApiOverview/FormEngine/Index.html#formengine).

There are certain requirements for such managed tables:

* The table must be configured in the [global TCA array](https://docs.typo3.org/m/typo3/reference-tca/master/en-us/Index.html#start). This will tell TYPO3 CMS things like the table name, features you have configured, the fields of the table and how to render these in the backend, relations to other tables, etc.
* The table must contain at least these fields:
  + “uid” - an auto-incremented integer, PRIMARY key, for the table, containing the *unique ID* of the record in the table.
  + “pid” - an integer pointing to the “uid” of the page (record from “pages” table) to which the record belongs.

# Plugins

Followings are some of the available plugins of typo3 I only used first 2:

* Microtemplate
* Scheduled Social
* Typo3 Gruene
* Start typo3 responsive
* Symfony VarDumper

# Learnings

It was trial for me I spent hours to install and configure spent many hours on stack overflow and quora to find out the errors but in the end I made it and it was worth it.

Typo3 is one of the best platform for the developer’s community to develop latest websites since typo3 provides aid in almost everything from simple templates to complex ones that a user can use to develop his own customized website in a lot shorter time and efficiency then using some normal tools.