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**Building web applications using MYSQL and PHP fma log.**

Some comments and points about error handling and failure points with regards to the development of this project.

Failure points could occur when a user is filling out our form and submitting it i.e :

* a user’s internet connection could fail while they are uploading a file.
* they may have forgotten to select a file to upload.
* PHP can have a max size of uploaded file restriction(as low as 2MB)
* File uploads can be disabled completely
* The number of files uploaded in one request is also restricted
* File / Directory permissions on server may not allow our script to do what it needs to ( they need to be set to 777)

We can use the error element from the $\_FILES array to asses any problems

The $\_FILES superglobal array will be populated by PHP with information about the uploaded file the user submits. the error element e.g: $\_FILES[‘image][‘error’] – will contain the error code associated with the file upload which can allow us to assess the situation should an error arise. if the error code is 0(UPLOAD\_ERR\_OK) – we can continue processing the uploaded file as that means there is no error and file uploaded successfully. If any of the other numbers, e.g 3(UPLOAD\_ERR\_PARTIAL) – the uploaded file was only partially uploaded, or any of the other numbers, we stop processing and inform user of the error .

* for future proof code we can use one of the predefined constants e.g. UPLOAD\_ERR\_OK instead of the raw interger value, incase in the future those integer values are changed in newer versions of PHP.
* Permissions on the server directories specifically for uploads must be changed to 777 using my FTP software Transmit otherwise functions like move\_uploaded\_file() will fail as it does not have permission by default to create/modify files in my web space on the uni’s titan server.
* For addressing only valid jpeg submissions, I can use the mime type to determine this. getimagesize($filename); returns an array with useful information including the width, height, type. Type should be "image/jpeg" or one of the constants IMAGETYPE\_JPEG;
* For sanitizing info for safe output, htmlentities() can be used on description and title that the user supplies.

errors generate on page load ‘ unfefined index ‘userfile’

solved: once a file has been uploaded into superglobal $\_FILES, the array is populated and it recognizes those indexes

* **is\_file**, **is\_readable**, when working with files, use etc.
* –When dealing with query strings, forms, cookies and sessions, we can use **isset($\_POST) to check it has been set.**

* For further control of errors, PHP also provides the *exception* model
* –*Exceptions* are unexpected events that interrupt a script's flow (what we tend to think of as errors)

Exceptions can be *thrown* and *caught*

•To *catch* exceptions, we wrap our code in a *try* block. If there is enough time we will try this method.