# Tools

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tool type** | **Command line** | **GUI-Mac** | **GUI-Windows** | **GUI-Linux** |
| IDE |  | PhpStorm  Eclipse  Komodo  etc. | PhpStorm |  |
| Code editor | emacs  vim  nano | Sublime Text  Atom | Sublime Text EditPad Pro  Atom  UltraEdit | Sublime Text |
| Version control | git | SourceTree | Github Desktop |  |
| Drupal CLI | drush |  |  |  |
| MySQL | mysql | Sequel Pro | Toad for MySQL |  |
| Virtual Machine | vagrant | VirtualBox | VirtualBox |  |
| Team: code management |  | github.com  bitbucket.com | github.com  bitbucket.com |  |
| Team: Issue tracking, etc. |  | JIRA Teamwork  Github | JIRA Teamwork  Github |  |
| XML/XSLT? |  | oXygen | oXygen |  |
|  |  |  |  |  |

# Resources

|  |  |
| --- | --- |
| **Islandora** | JIRA: <https://jira.duraspace.org/projects/ISLANDORA/issues> Dev docs: <https://wiki.duraspace.org/display/ISLANDORA/APPENDIX+H+-+Documentation+for+developers>  How stuff gets into Islandora:<https://github.com/Islandora/islandora/wiki/Islandora-Committers-Workflow> |
| **Drupal** | Core hooks: <https://api.drupal.org/api/drupal/includes!module.inc/group/hooks/7>  Drush: <http://drushcommands.com/>  Coding standards: <https://www.drupal.org/coding-standards> |
| **Github** | Best practices: <https://github.com/Islandora/islandora/wiki/Git-Guidelines-and-Best-Practices>  Getting started guide (from Library Year of Code, veryhandy):  <https://github.com/LibraryCodeYearIG/Codeyear-IG-Github-Project/tree/master/Getting%20Started>  Pro Git manual: <https://git-scm.com/book/en/v2> |
| **Sublime Text plugin and Server-side script “RSUB”** | RSUB (fork of rmate) allows you to remote edit files in Sublime Text 3 using remote port forwarding.  `sudo wget -O /usr/local/bin/rsub https://raw.github.com/aurora/rmate/master/rmate`  `sudo chmod a+x /usr/local/bin/rsub` Usage “rsub file” will open in Sublime Text using RSUB plugin. |

## Random Tips

* Don’t do much until you understand your particular requirements and exactly how it is not met by any existing module. Often you can hook into an existing module and make small changes, rather than build from scratch.
* Spend time understanding how other modules work that are doing something similar to what you’re doing. You may discover functions they’ve implemented that do exactly what you need. You may need to do a module\_load\_include() to make that function available to you (be sure to add that module as a dependency for your module).
* Rather than ask the module maintainer to add a feature, it may make more sense to ask that they add a hook that enables you to add the feature.
* Figure out hooks provided by a module by looking for a file named modulename.api.php.
* Find undocumented hooks by searching for “drupal\_alter”, “module\_invoke\_all”, “module\_implements” (then ask the module maintainer to document them!).
* Find all modules that implement a particular hook by enabling the devel module, and using the following drush command: drush fnh hookname, e.g. “drush fnh block\_info”.
* Your module’s .module folder should only have hook implementation functions, and constants/functions that you want to be public (available to other modules).
* Within your functions in \*.module, keep the code to a minimum, and instead use module\_load\_include() to be able to implement the bulk of your function in an include file. This keeps unnecessary overhead to a minimum (drupal is slow enough without our help!)
* Use caching and static variables liberally (good ref: <https://www.lullabot.com/articles/a-beginners-guide-to-caching-data-in-drupal-7>)
* Learn how to use render arrays (for forms and a lot of other stuff).
* You can do many things at the theme level (template.php and template files), but should you? If it’s functionality that you want tied to a theme, it may make sense to do so. Otherwise, it should be a module. All the functions that you can implement in template.php can be implemented in your module. You can also provide template overrides in your module by implementing hook\_theme\_registry\_alter as described here: <https://www.drupal.org/node/715160>