

Final Project Specifications 4002-XXX

(These specifications may be changed by the instructor at any time)

Purpose:

You will be required to produce licensed open source software.

Projects must be approved by the instructor.

Project may be:

- Desktop application
- Server software
- Software libraries
- Framework
- Service
- Tweaking package
- Game
- Collection of widgets or screenlets
- Library interfacing package
- Command line or graphic utilities
- Front-end to existing library/package
- Port of a non-Linux application
- Android™ application (with permission)
- Other type of software (with permission).

Project Guidelines:

- Projects may be done as a group or individually
- Projects may or may not have a GUI
- Projects may leverage existing **open source** code, projects, frameworks, libraries, SDKs or utilities
- Projects may use open source GUI designing/building tools
- Projects may be done in a variety of languages, or even multiple languages
- Projects will only be released if code quality is acceptable
- Project creators may choose the open source license to use
- Project creators may license to more than one license
- Project creators may number version in any way they want as long as it follows the conventions of an RPM or DEB file
- Project creators may choose to use any open source debugging or testing tool.
- Project creators may use any open source IDE
- **You may claim your work under the names of you and your group members. You may use this on your resume and continue development.**



Project Requirements:

- All projects **must** be approved by the instructor
- Project **must not** already be available as an open source package, or if it is it **must** be justified.
- Project **must not** be too simplistic, irrelevant or cliché even if an open source version does not exist.
- All **group** projects must be licensed to an open source license. It is strongly suggested that individuals working alone license their work to an open source license.
- All projects leveraging (improving, forking, building on top of, etc) open source code must continue using the license of the code used. Projects using other open source software indirectly (IE: MySQL database for storage, Linux as platform or something else that exists on its own) do not need to follow the license of those products.
- If applicable, project **must** use free creator-owned graphics or free existing graphics
- All projects **must** use version control software
- All projects **must** be packaged into an RPM or DEB file
- All projects **must** have a script to run the software **OR** an install script (or both)
- Projects may store data in flat files or use a storage engine.
- If using a storage engine, project **must** use an **existing** open format storage engine (XML, YAML, couchdb, mysql, etc)
- All projects **must** have their own configuration directory (IE: folder to hold configuration files and, if applicable, user preference data). If you do not need this, justify it.
- All projects **must** have proper code documentation and end-user documentation
- All projects **MUST NOT** be malicious
- All projects **MUST NOT** store sensitive user data (SSN, etc). Additionally, sensitive data **MUST NOT** be sent across a network.
- All projects **MUST NOT** obfuscate their code
- All projects **MUST** contain a copy of their corresponding license(s)
- All source code files (.c, .py, .java, etc) **MUST** contain the corresponding licensing info at the top of the file
- All source code files (.c, .py, .java, etc) **MUST** be well commented
- All projects **MUST** give credit and licensing info of leveraged source code, libraries, etc.

Submitting your work:

All work(source code, documents, man pages, diagrams, graphics, etc.) must have your team members names in them, the corresponding licensing info in the top of source code files and a copy of the corresponding license(s). **You may choose to name your development team, as well.**



Grading:

- Severe points will be taken off for poor code quality, and the project will not be released
- Points will be lost for missing code documentation, missing end-user documentation, uncommented code, missing licensing information, missing license copies, etc
- Points will be taken off for obfuscating code
- Points will be taken off for not using version control software
- Points will be taken off for not providing an RPM or DEB file
- Points will be taken off for not providing a script to run the software or an install script
- You will fail for using non-free graphics
- You will fail for not giving credit and licensing info of leveraged source code, libraries, etc.
- You will fail for using malicious code
- You will fail for using proprietary code
- You will fail for storing or transmitting sensitive data (SSN, etc)
- Bonus points **may** be awarded if the project works on
 - Linux **AND** Microsoft Windows
 - Linux **AND** Apple OS X
 - Linux **AND** Android

