{:title "Clojure File to Standalone Jar" :layout :post :tags ["Clojure" "Guide" "Code"]}

Clojure luckily relies on the JVM and thus it is easy to turn a .clj into a .jar with relative ease. Of course there are some things you have to watch out for such as making sure that the -main function contains everything and nothing is in the top level that's supposed to be in the -main function. So start with the basics start a leiningen project running the following. . .

```
$ lein new defunsmproject
```

This will create a new leiningen project which now means you should have a project.clj file. That looks something like this.

```
(defproject defunsmproject "0.1.0-SNAPSHOT"
  :description "FIXME: write description"
  :url "http://example.com/FIXME"
  :license {:name "Eclipse Public License"
            :url "http://www.eclipse.org/legal/epl-v10.html"}
  :dependencies [[org.clojure/clojure "1.8.0"]])
```

Your core.clj should look like this which is located in the src directory of the leiningen project directory.

```
(ns defunsmproject.core)

(defn foo
  "I don't do a whole lot."
  [x]
  (println x "Hello, World!"))
```

Step 1: Edit project.clj so that leiningen knows which one is your -main function. In this cause it would be defunsmproject.core. As well as adding :profiles telling leiningen how to build the jar file.

```
(defproject defunsmproject "0.1.0-SNAPSHOT"
  :description "FIXME: write description"
  :url "http://example.com/FIXME"
  :license {:name "Eclipse Public License"
            :url "http://www.eclipse.org/legal/epl-v10.html"}
  :dependencies [[org.clojure/clojure "1.8.0"]]
  :profiles {:uberjar {:aot [defunsmproject.core]}} ;; add this
  :jar-name "defunsmproject.jar" ;; add this
  :uberjar-name "defunsmproject-uber.jar" ;; add this
  :main defunsmproject.core) ;; add this
```

Step 2: Add :gen-class and -main function in the core.clj.

```
(ns defunsmproject.core
  (:gen-class)) ;; add this gen-class

(defn -main [& args]  ;; add this -main function
  (println "Converting a clojure file to a standalone jar!"))
```

Step 3: Now you can make a uberjar which is the standalone jar by running . . .

```
$ lein uberjar
```

If that worked than your in good luck and should have a uber-jar and a jar. The standalone one that you probably want is the uber-jar one which will be in the the target directory that was generated. To run the jar file do the following. And you should see the output as expected.

```
$ java -jar defunsmproject-uber.jar
```

If you run into problems make sure that your project.clj and core.clj is set up just like mine. Otherwise you now have a .jar file from a .clj file!