## The ACL2 Books Repository

acl2-books.googlecode.com



Jared Davis, Matt Kaufmann, Sol Swords (and You!)

ACL2 Workshop 2009 Boston, MA 5/12/09

### Goals

# We think books are really important. We want better standard books.

Integrated, comprehensive lemma libraries (arithmetic, lists, sets, alists, ...)

High-quality automation of repetitive tasks (defstructure, deflist, flag, ...)

Well documented, organized, approachable, and widely used

### A First Step

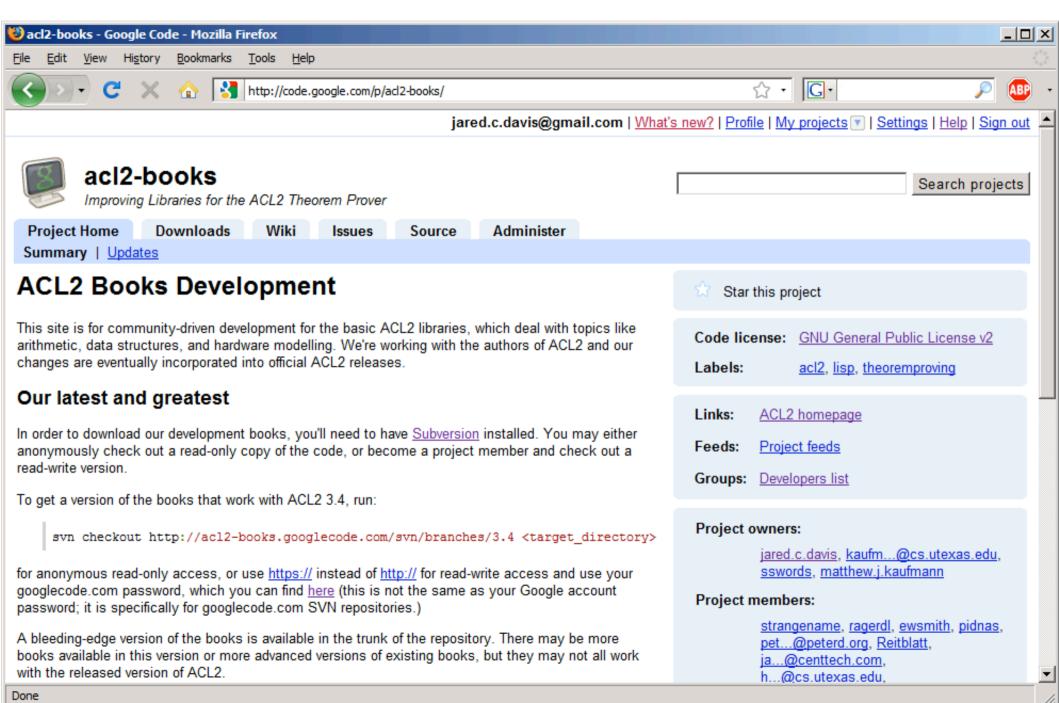
We want to encourage collaboration. We made a repository and project page.

You can add and improve books using Subversion instead of email.

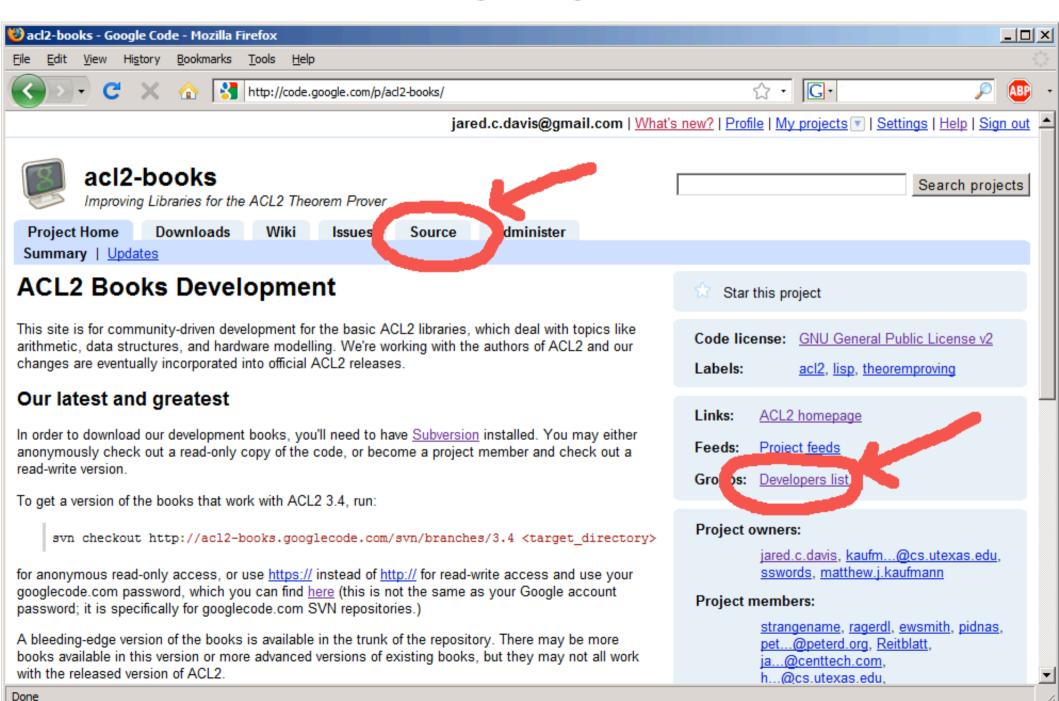
You can see what others are changing by following our email list.

You can get everyone's improvements without waiting for the next ACL2 release.

#### acl2-books.googlecode.com



#### acl2-books.googlecode.com



# New Books (top level)

**arithmetic-5** better than arithmetic-4

coi comprehensive collection of libraries

defsort instantiable, stable mergesort

hons-archive writes ACL2 objects to disk

regex regular-expression library

security/jfkr key exchange protocol model

str basic string library

rtl/rel8 now with arith-5 compatibility!

## New Books (tools/)

defined-const

efficient (defconst \*foo\* (bar)) and prove (equal (bar) \*foo\*).

rulesets

extensible deftheory replacement

flag

introduce flag functions

mv-nth

meta-rule for handling mv-nth

saved-errors

error reporting tool for make-events with lots of sub-events

stobj-help

(def-stobj-theory stobj) proves basic theorems about a stobj

## Many Other Improvements

New clause processors

Makefile dependency automation

Cert.pl build system (eliminates directory-level dependencies)

Additional theorems, rule tweaks, ...

#### Resources



acl2-books.googlecode.com groups.google.com/group/acl2-books



subversion.tigris.org (web site)
svnbook.red-bean.com (book)

### Subversion Externals

