

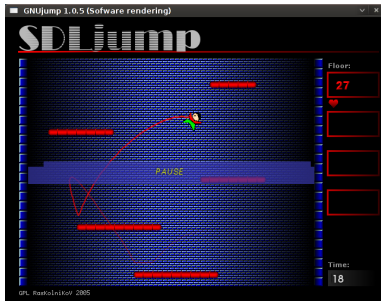
Practical session 2: Packaging GNUjump

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Practical session 2: packaging GNUjump

- 1 Download GNUjump 1.0.6 from <http://ftp.gnu.org/gnu/gnujump/1.0.6/gnujump-1.0.6.tar.gz>
- 2 Create a Debian package for it
 - ▶ Install build-dependencies so that you can build the package
 - ▶ Get a basic working package
 - ▶ Finish filling `debian/control` and other files
- 3 Enjoy



Step by step...

- ▶ `wget http://ftp.gnu.org/gnu/gnujump/1.0.6/gnujump-1.0.6.tar.gz`
- ▶ `mv gnujump-1.0.6.tar.gz gnujump_1.0.6.orig.tar.gz`
- ▶ `tar xf gnujump_1.0.6.orig.tar.gz`
- ▶ `cd gnujump-1.0.6/`
- ▶ `dh_make`
 - ▶ Type of package: single binary (for now)

```
gnujump-1.0.6$ ls debian/
changelog          gnujump.default.ex  preinst.ex
compat            gnujump.doc-base.EX prerm.ex
control           init.d.ex           README.Debian
copyright         manpage.1.ex       README.source
docs              manpage.sgml.ex    rules
emacsen-install.ex manpage.xml.ex      source
emacsen-remove.ex  menu.ex            watch.ex
emacsen-startup.ex postinst.ex
gnujump.cron.d.ex  postrm.ex
```



Step by step ... (2)

- ▶ Look at `debian/changelog`, `debian/rules`, `debian/control` (auto-filled by **dh_make**)
- ▶ In `debian/control`:
Build-Depends: `debhelper (>= 7.0.50)`, `autotools-dev`
Lists the *build-dependencies* = packages needed to build the package
- ▶ Try to build the package as-is (thanks to **dh** magic)
 - ▶ And add build-dependencies, until it builds
 - ▶ Hint: use `apt-cache search` and `apt-file` to find the packages
 - ▶ Example:

```
checking for sdl-config... no
checking for SDL - version >= 1.2.0... no
[...]
configure: error: *** SDL version 1.2.0 not found!
```

→ Add **libsdl1.2-dev** to Build-Depends and install it.

- ▶ Better: use **pbuilder** to build in a clean environment



Step by step ... (3)

- ▶ After installing `libsdl1.2-dev`, `libsdl-image1.2-dev`, `libsdl-mixer1.2-dev`, the package builds fine.
- ▶ Use `debc` to list the content of the generated package.
- ▶ Use `debi` to install it and test it.
- ▶ Fill in `debian/control` using <http://www.debian.org/doc/debian-policy/ch-controlfields.html>
- ▶ Test the package with `lintian`
- ▶ Remove the files that you don't need in `debian/`
- ▶ Compare your package with the one already packaged in Debian:
 - ▶ It splits the data files to a second package, that is the same across all architectures (→ saves space in the Debian archive)
 - ▶ It installs a `.desktop` file (for the GNOME/KDE menus) and also integrates into the Debian menu
 - ▶ It fixes a few minor problems using patches

