

# Franx Crossword Puzzle Generator

## (xword Version 6.58)

### User Guide

The Basic Premise of the program is to take a list of word and clues, then turn it into a Cross-word puzzle.

The command line syntax is:

```
xword [<input-file>] [<dictionary-file>]
```

If the parameters are missing from the command line they are prompted for. If the dictionary is omitted, the puzzle is generated with just the puzzle; otherwise the dictionary is used to attempt to fill in the “black holes” in the puzzle. The output is a HTML file, which can be used to print out the puzzle using a web browser, or word processor, as well as a sed script to turn the original text into “Number Across/Down” encoding, e.g. if you want to send someone a coded message.

The program to produce the dictionary is called xwindex, the syntax is

```
xwindex [<dictionary-file>]
```

(It takes around 16 secs, to process a file of 900 words). Both these files can be converted from flat ASCII text files by a shell script called “cruncho” (for want of a better name!). (Clues for the input file must be entered manually using a text editor.) When the second phase (“filling”) of the program is entered the words the dictionary finds are numbered in a menu and the number prompted for. When the program runs out of words and holes , it exits, or you can hit <CTRL-C> to save and exit.

# Program Documentation

## Version History

This program was initially my individual project at Monash Uni, I think the supervisor was so impressed he passed me! This was version 1 on a Pyramid 80x running UNIX. I enquired how I could retain a copy of the source code, I was told they would keep it on tape. A couple of years went by, I got jobs cutting COBOL and as I didn't have a PC at home, I waited until I got a job working in "C". When I rang the Monash Computer Centre I was told "we don't keep tapes that long".. There was nothing for it but to key it back from the hard copy source listing. So took a PC home one night and keyed the program back in, and had the program running on AZTEC "C", then on SCO Xenix, then Red Hat LINUX, followed by Debian, Ubuntu, Mint and finally macOS...

At some stage, I had the bright idea, to convert the output to HTML, rather than a raw print file, this was version 2. Version 3 was the dictionary; I don't know what happened to 4 and 5. Now we are 6!!

# Files

Makefile	makefile
defs.h	Generic Header file
xword.h	Xword header file
xword.c	main() function
xw_buildpuzz.c	Builds the puzzle a word at a time
xw_create_links.c	Creates links to each word with the same letters
xw_error.c	Error handler
xw_fillpuzz.c	Does the filling
xw_html.c	Writes out HTML file; and sed
xw_initpuzz.c	Creates initial puzzle
xw_listutil.c	Word list utilities
xw_matchpuzz.c	Returns true if both puzzles are the same
xw_printpuzz.c	Prints puzzle to console
xw_puzzutil.c	Puzzle Utilities
xw_readsort.c	Reads the clue file
xw_sizedict.c	Returns the longest word in the dictionary
xw_tryword.c	Test to see if a word fits in the puzzle
xwindex.c	Creates dictionary
datecomp.c	Evaluates date compiled (and version)
version.c	Stores version and date compiled