

Process



generate undefined symbols
using `nm -u application.o`

create linker script `debloating.ld` that
`KEEP&SORT` a `sharedlib` section of undefined symbols

`ld -r -o liball.o lib1.o ...libn.o`

symbol conflict?

No

Yes

rename symbols with library and application
`objcopy --redefine-sym xx=xx_x libx.o libx.o`

generate the `liball` binary with `KEEP` in linker script
`gcc -Wl,--gc-sections-Wl,-T,debloating.ld -o libfuc liball.o`

generate the `liball` binary with no `KEEP` in linker script
`gcc -Wl,--gc-sections-Wl,-T,general.ld -o libnofunc liball.o`

generate the application required functions list
`(nm -C libfuc) - (nm -C libnofunc)`

update the function list in linker script with `KEEP`

build app binary and `liball.o` with new linker script

remove the `sharedlib` section from app binary
`objcopy --remove-section=.sharedlib binary`