Handling Compiler Flags in fpm
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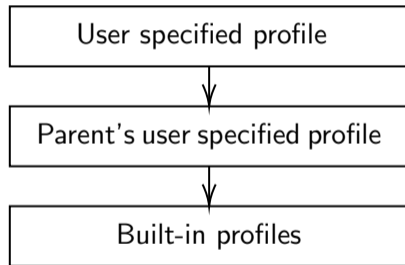
Motivation behind this project

- ▶ Previous state
    - ▶ Command line
    - ▶ Default flags

```
>>> fpm build --flag "-O1 -g"
```

- ▶ Enable compiler options scope

```
[profiles.debug.gfortran.linux]
flags="-g -Wall"
c_flags="-O1 -g"
link_time_flags="-xlinkopt"
files={"greet_m.f90"="-g -fcheck=all"}
```

- ▶ TOML table
- ▶ Four implemented fields

- ▶ User specified or built-in profiles
- ▶ Profiles hierarchy

```
┌─────────────────────────────────┐
│      User specified profile      │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│  Parent's user specified profile │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│        Built-in profiles         │
└─────────────────────────────────┘
```
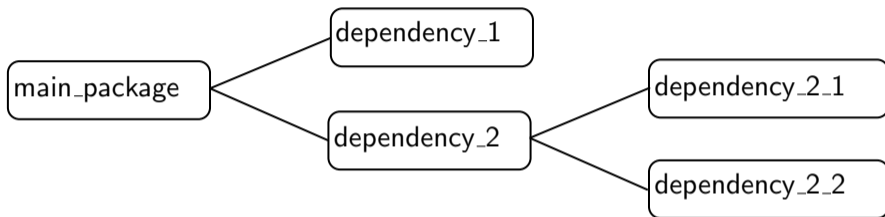
Examples

fpm.toml

```
name="hello_world"

[profiles.gfortran.linux]
flags="-Wall"

[profiles.debug.gfortran.linux]
flags="-g -O1"

[profiles.debug.ifort.linux]
flags="-g -traceback"
```

Compiler options on a Linux system for debug profile using

- gfortran: `-g -O1 -Wall`
- ifort: `-g -traceback`

Package	Flags specified	Flags used
main_package	-g	-g
dependency_1	-g -O1	-g O1
dependency_2	NONE	-g
dependency_2_1	-g -O2	-g O2
dependency_2_2	NONE	-g