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Operating System Project 10hp

SSIK : Simply & Stupidly Implemented Kernel
Project Convention

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1. Project

The project name, **SSIK**, standing for: “Simply & Stupidly Implemented Kernel”, is the reversed acronym of **KISS**. **KISS** is an acronym for the design principle “keep it simple and stupid”.

With this project we will try to follow this as a main rule.

1.1 Folder hierarchie

```
root
|- bin/
|- build/
|- doc/
|- include/
|- Makefile
|- README
|- report/
|- scripts/
|- src/
   |- kernel/
   |- user/
```

Description of all the folder:

bin contain the final binarie

build contain the object file

include contain the API and system library header file

Makefile the project Makefile. Support many option, see further

README captain obvious prevent me to explain this

report contain project report, such as this document

scripts script folder, mainly for simisc

src/kernel contain the code of the kernel

src/user contain the code of all the user software

1.2 Makefile

The make file propose this option:

all build everything

clean clean every build

indent indent all the source with the indent software

kernel only compile the kernel part. But don't link anything

user only compile the user part without the system library. But don't link anything

run build everything and run the system in simisc

2. Coding convention

2.1 Code formating

We follow the GNU coding conventions (`http://www.gnu.org/prep/standards/standards.html#Writing-C`) with this modification:

- the block bracket inside a functions should not be indented (`-bli0` in indent)
- no space between a function name and the parenthesis (`-npcs` in indent)
- comment at the right of the code should be aligned (`-c33` in indent)
- name of variable in declaration should be aligned on a column (`-di16` in indent)

The makefile provide an indent option to easily indent everything.

2.2 Comment formating

2.2.1 General information

- comment starting by `/**` will be indexed, not thos started by `/*`
- use at least a brief description with `@brief`. To add a long comment, add a white line after the brief comment
- this tag can be used to comment any structures, variables, etc.

2.2.2 File comment

```
/**
 * @file file name
 * @brief Brief description
 *
 * Long description
 */
```

```
/* end of file filename.x */
```

2.2.3 Function comment

```
/**
 * @Brief description which ends at this dot.
 *
 * Details follow here.
 *
 * @param a param
 * @return the return value
 */
```

3. Good use of git