README check

View as webpage

```
 sudo pip3 install grip
 grip  README.check.md
 # open http://localhost:6419/
```

Description

This is the checker used to automatically grade homeworks at PC CA.

The name of the checker is `check`. It is written in `Python 3.6`.

What does it do?

It will do the multiples steps.

All steps marked with `[STOP]` are required. If one failed the checker will stop. All steps marked with `[OPTIONAL]` are optional and can be disabled from config.

1. `deps`: Check if all dependencies are installed on local system in order to build/run/grade the homerwork.

2. `build`: Build homework. 2.1. [STOP] `Makefile`: Check if `Makefile` exists. 2.2. [STOP] `make`: Run `make build` in order to build all binaries. 2.3. [OPT `warnings`: If warnings are detected, a penalty to final grade is applied.

3. `run`: Run all tests for specified tasks (all or one). 3.1 [STOP] `run`: Run task for current test. Continue iff the program exited successfully. 3.2 [STOP] `check`: Check if the solution is correction. Continue iff the program found solution for task/at least one subtask. 3.3 [OPT] `valgrind`: Check for memory leaks and errors. If valgrind found problems, the test grade is 0.

   `Note`: This stage is using an explained `legend`:

   1. `UPS`: Ups, program crashed e.g null pointer dereference, negative or to big array/matrix indices
   2. `TLE`: Time Limit Exceed e.g. infinit loop or too slow
   3. `MLE`: Memory Limit Exceed e.g. too much allocated memory (in total or for some segments)
   4. `MEM_UPS`: Memory leaks or errors e.g. invalid memory access, unfreed dynamic-allocated arrays
   5. `WA`: Wrong Answer (wrong or partial output) e.g. output is missing or has other value
   6. `OK`: Everything is OK.

4. `style`: Run coding style checker to automatically report most common mistakes.

5. `README` : Basic check for reminding students to put a readme file before final submission `Note` : If the `README` is missing, a penalty to final grade is applied.

6. `clean` : Remove all generated files by running the `make clean` command.

7. `grade` : Prin final grade (which is always non-negative).

Installation

The `install` script can be used to install all dependencies for `check`.

Note: Please inspect the script to see which are the requirements.

```
sudo ./install
```

Usage

- help

```
usage: check [-h] [--task {ninel,vectsecv,codeinvim,nomogram}]
             [--legend {True,False}]

check homework

optional arguments:
  -h, --help            show this help message and exit
  --task {ninel,vectsecv,codeinvim,nomogram}
                        task name
  --legend {True,False}
                        print legend
```

- run entire homework

```
./check
```

- run only one task

```
./check --task <task_name>
```