Avoid Global Installation of Packages

Quick Instructions

Inside a `npm` managed directory add the local installation directory to the path:

```
PATH=`pwd`/node_modules/.bin:$PATH
```

Strip the first path from PATH:

```
PATH=${PATH#*:}
```

Shell Functions

`nact` saves PATH, then prepends it with the local installation directory, if inside an `npm` managed directory. It prevents multiple invocations.

`ndeact` restores the PATH previously saved by `nact`.

```
nact () {
    if [ -n "$NPM_MODULES_PATH" ]; then
        echo already activated: $NPM_MODULES_PATH
        return
    fi
    if [ ! -d ./node_modules/.bin ]; then
        echo not in a npm package directory
        return
    fi
    export NPM_MODULES_PATH
    NPM_MODULES_PATH=`pwd`/node_modules/.bin
    export NPM_ACTIVATE_PATH
    NPM_ACTIVATE_PATH=$PATH
    PATH="$NPM_MODULES_PATH:$PATH"
    export NPM_ACTIVATE_PS1
    NPM_ACTIVATE_PS1=$PS1
    PS1="(npm)$PS1"
}
ndeact () {
  if [ -z "$NPM_MODULES_PATH" ]; then
      echo nothing to deactivate
      return
  fi
  unset NPM_MODULES_PATH
  PATH=$NPM_ACTIVATE_PATH
  unset NPM_ACTIVATE_PATH
  PS1=$NPM_ACTIVATE_PS1
  unset NPM_ACTIVATE_PS1
}
```

Rationale

It is common to install commandline utilities like Gulp or Vue CLI with -g (global) commandline switch, so they are available via the standard search PATH.

Global installation has several drawbacks, e.g.:

- Versioning: different projects with different Node.js versions might require different versions of the tool
- Privilege elevation is often required to install software globally

Alternatives

Other, probably more sofisticated techniques exist to acchive the same or similar functionality, see: https://npm.github.io/installation-setup-docs/installing/using-a-node-version-manager.html

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