# Mircowave Oven : 2nd Hand-in

|  |  |
| --- | --- |
| Team | 42 |
| Mads Krabsen | 201507805 |
| Tobias Dalgaard Nielsen | 201507194 |
| Christian Luke Pedersen | 201509718 |
| Jonas Kjær Rask | 201507306 |

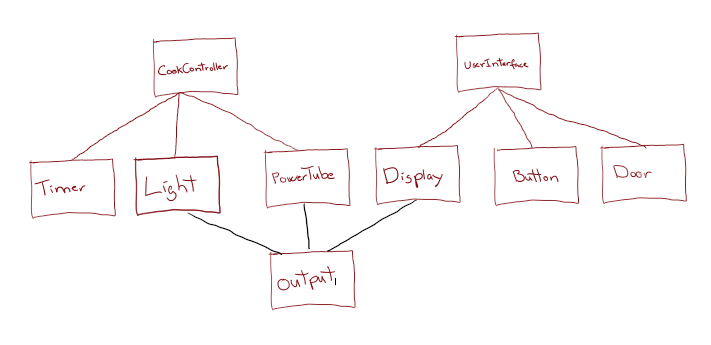
## Jenkins

## Github Repository

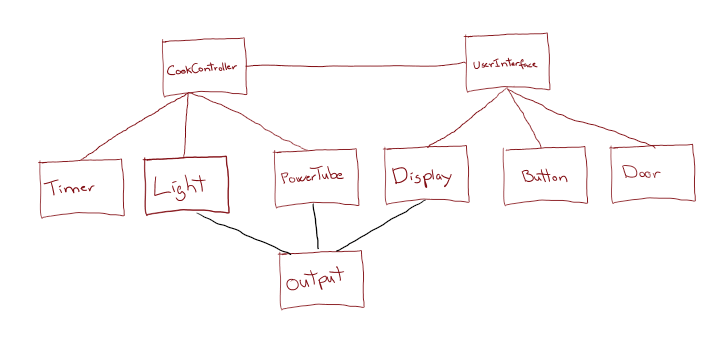
https://github.com/Krabsenm/SWT42\_MicroWaveOven.git

## Dependency tree

Without dependency between CookController and Userinterface



With dependency between CookController and Userinterface



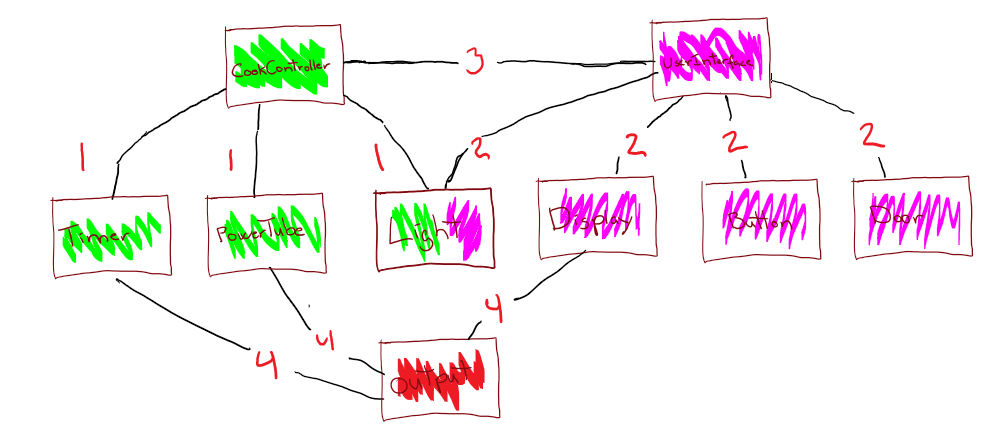
## Integration test strategy

To test the software we have considered the following patterns:

* Big Bang integration Pattern
  + The Big Bang Pattern is not used because it has a very low probability of detecting the errors in the code, and even harder to pin point where in the software the error originated.
* Collaboration Integration Pattern
  + The Collaboration Pattern is not used because the software given is described in one use case and this practically makes the pattern equivalent to the Big Bang Pattern.

The Top down/buttom-up Integration Pattern is chosen as the integration strategy because of the following advantages:

* Do to the shallow depth of the dependency tree there is no difference between top-down and buttom-up.
* The dependency tree shows that the cluster only has three layers; the bottom layer, top layer and one middle layer. Where the “output” class, do to the troublesome testability of an output class, it will be stubbed out for all integration tests until the last layer.



|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Steps | CookController | UserInterface | Timer | PowerTube | Light | Display | Button | Door | Output |
| 1 | D | F | x | x | x | x |  |  | F |
| 2 | F | D |  |  | x | x | x | x | F |
| 3 | x | D | x | x | x | x | x | x | F |
| 4 | x | D | x | x | x | x | x | x | x |

D = Driver, F = fake, x = this module is included in the test.

## Errors detected doing integration testing

1. In CookController function OnTimerTick() the TimeRemaining count is wrongfully converted from milliseconds to seconds. We corrected this by dividing milliseconds by a thousand.