**State Challenge**

**July Trendafilov**



# Part 1

## State Diagram

Diagram

Description automatically generated

# Part 2

## Code testing

I tested the code in the bread bake using mock tests to see if the execution of the program goes to the desired state. The results are correct as there are no errors. I did 22 tests for all of which have 0 memory leaks(VALGRIND) and no error from the static code analysis (Klocwork). The gmock test have tested all appearances of events. Apart from unit testing. I tested the code on target. I started the application a couple of times using different programs and it has the desired effect from the assignment.

# Part 3

## Remarks

There are a couple remarks regarding the implementation.

1. The methods in the breadbake class don’t return a State but rather change the state by reference.
2. The methods are public for easier testing.
3. Each state machine is in a different method.
4. GoogleTests weren’t broadly used due to simple arithmetic and operations.