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## **Team Deliverable 2**

### **The Testing Process**

We will begin by individually testing different methods by hand from the terminal. Then we will build a testing framework and test both individual methods as well as systems of methods.

### **Requirements traceability**

- isRunning -> returns true if the time is running, otherwise false
- setRepeat -> timer is set to repeat if the flag is true, otherwise false
- start -> starts the timer
- stop -> stops the timer
- getDelay -> returns the current delay time set for a timer

### **Tested items**

We will be testing methods from the timer.py class. Methods including setRepeat, isRunning, start, stop, and getDelay; all from the Timer2 class.

### **Testing schedule**

- September 27th -> Create Test Plan and specify 5 tests
- October 7th -> specify 15 test cases
- October 14th -> specify all 25 test cases
- October 18th -> Design and build Testing framework
- October 28th -> Have 10 tests implemented within framework
- November 4th -> Have 20 tests implemented within framework
- November 10th -> Have all 25 test cases running through the Testing framework

### **Test recording procedures**

For each test there will be a file describing what method/requirement is being tested along with the inputs and expected outputs. There will also be a test report created from each test with the expected output, input, and test description.

### **Hardware and software requirements**

The tests will require jythonMusic software, a Jython compiler, and the executable jMusic program. Further testing may require the jsyn synthesizer.

## Constraints

The main constraint will be available time. The team is composed of 3 full time students all of whom are working as well. Making time to meet and work together will be challenging but not impossible.

## System tests

This section, which may be completely separate from the test plan, defines the test cases that should be applied to the system. These tests are derived from the system requirements specification.

### Test1:

1. testIsRunning
2. This test will run the isRunning method, which will check if a timer object has been started.
3. Timer2.start
4. Timer2.isRunning
5. test input(s) including command-line argument(s)
6. false

### Test 2:

1. testSetRepeatsetFlagTrue
2. This test will check that if the flag is true that repeat is set to true also
3. Timer2.repeat
4. Timer2.setRepeat()
5. test input(s) including command-line argument(s)
6. true

### Test 3:

1. testStartWithoutRepeat
2. A timer task starts on command
3. running
4. Timer2.start()
5. n/a
6. Timer2.running = true

### Test 4:

1. testStop
2. A timer object stops after being created and started.
3. Timer2
4. Timer2.stop()
5. n/a
6. Timer2.running = false

## **Test 5:**

1. testGetDelay
2. Ability to use delay time interval
3. Timer2.timeInterval
4. Timer2.getDelay
5. setDelay(time)
6. time

## **Test X:**

1. test number or ID
2. requirement being tested
3. component being tested
4. method being tested
5. test input(s) including command-line argument(s)
6. expected outcome(s)