



CS 1632 Software Quality Assurance

Deliverable 4

Member 1 Name: Shishir Timsina

Member 2 Name:

Team Name: Shishir_d4

1. Introduction

Write your retrospective here. Please describe the division of work between group members. Also, please describe any difficulties that you faced while using VisualVM.

I worked alone. No issues with VisualVM.

2. Optimized Feature 1

- Write the name of the feature optimized (the label on the button)
Run/Run Continuous
- Write the name(s) of the method(s) you refactored to optimize this feature
iterateCell, calculateNextIteration

Name	Self Time (CPU)			Total Time (CPU)		Invocations
RunContinuousButton\$RunContinuousButtonListener.actionPerformed (java.awt.event.ActionEvent)	0.0 ms	(-%)		0.0 ms	(-%)	1
Cell.getAlive ()	0.0 ms	(-%)		0.0 ms	(-%)	604,250
Cell.setAlive (boolean)	0.0 ms	(-%)		0.0 ms	(-%)	120,853
Cell.resetBeenAlive ()	0.0 ms	(-%)		0.0 ms	(-%)	3
Cell\$CellButtonListener.actionPerformed (java.awt.event.ActionEvent)	0.0 ms	(-%)		0.0 ms	(-%)	3
MainPanel.backup ()	0.0 ms	(-%)		0.0 ms	(-%)	2,417
MainPanel.calculateNextIteration ()	0.0 ms	(-%)		0.0 ms	(-%)	2,417
MainPanel.runContinuous ()	0.0 ms	(-%)		0.0 ms	(-%)	1
MainPanel.getNumNeighbors (int, int)	0.0 ms	(-%)		0.0 ms	(-%)	60,425
MainPanel.iterateCell (int, int)	0.0 ms	(-%)		0.0 ms	(-%)	60,425
MainPanel.displayIteration (boolean[][])	0.0 ms	(-%)		0.0 ms	(-%)	2,417
RunContinuousButton\$GameRunnable.run ()	0.0 ms	(-%)		0.0 ms	(-%)	1

3. Optimized Feature 2

- Write the name of the feature optimized (the label on the button)
Write
- Write the name(s) of the method(s) you refactored to optimize this feature
MainPanel.toString() -> Cell.toString()
- Insert a screenshot of VisualVM CPU profiling **after** optimizing Feature 2. Please show only the profile for Feature 2 (do not invoke Feature 1 while profiling). Please include only the “Hot spots” window in the screenshot, as before.

RunContinuousButton\$RunContinuousButtonListener.actionPerformed (java.awt.event.ActionEvent)	0.0 ms	(-%)	0.0 ms	(-%)	1
Cell.toString ()	0.0 ms	(-%)	0.0 ms	(-%)	25
Cell.getAlive ()	0.0 ms	(-%)	0.0 ms	(-%)	882,525
Cell.setAlive (boolean)	0.0 ms	(-%)	0.0 ms	(-%)	176,503
Cell.resetBeenAlive ()	0.0 ms	(-%)	0.0 ms	(-%)	3
Cell\$CellButtonListener.actionPerformed (java.awt.event.ActionEvent)	0.0 ms	(-%)	0.0 ms	(-%)	3
WriteButton\$WriteButtonListener.actionPerformed (java.awt.event.ActionEvent)	0.0 ms	(-%)	0.0 ms	(-%)	1
MainPanel.toString ()	0.0 ms	(-%)	0.0 ms	(-%)	1
MainPanel.stop ()	0.0 ms	(-%)	0.0 ms	(-%)	1
MainPanel.backup ()	0.0 ms	(-%)	0.0 ms	(-%)	3,530
MainPanel.calculateNextIteration ()	0.0 ms	(-%)	0.0 ms	(-%)	3,530