

Additional Notes on Some Tweaks To Code & Additional Code ReadMe Files, Including for Slight Modification to Code for Coordinate-Based Simple Demo of Epidemic Simulation Tool & for Slight Modification to Code when Added a Few Sample Demo Runs with Several Sims Each & for Added Readme Note for Running Demo with Several Sims per run.

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(Text description of idea for which initial phases of computational structure are implemented in code files: Sample computational structures towards an epidemic simulation tool comprising communicating programs on mobile phones and servers Y.E. Marshall Y.E.M. Tech Developer yaelm @ alum . mit . edu)

Tweak for Coordinate-Based Simple Demo to possibly reduce some of the ~random ~errors:

See java code files. See text & pdf files which copy/paste code. The only modification is one symbol change within one of the java code files. This is described below. Small modification, specifically to java code file CentralComputerCentralParametersAndData: to approximately go around some possible communication misses or computation misses (or random ~errors), had each timestep temp spatial sim inf info (and less frequently daily tallies) be reset whenever gathered info from $\geq$ #smartdevs rather than $=$ #smartdevs; so the modification is a change from $=$ to $\geq$ in the following line of code:

```
if (countForInfoBeingAssembled  $\geq$  numSmartDevs) {
```

```
[previous untweaked form of code: if (countForInfoBeingAssembled  $=$  numSmartDevs) { ]
```

Additional Tweak(s) to Code(s) for Simple Demo Place-Based and Simple Demo Coordinate-Based when added a few runs with multiple sims each (to schematically illustrate more quantitative summaries of multiple stochastic sims per generated synthetic spatio-temporal info setup with a run):

See java code files. A possible tweak for process code simpleDemo... addition of a few optional lines of code. Adds 3 lines code to start ~smartdevice ~periodictasks setup time after already waited for gensyntheticinfo. Code lines optionally added:

```
//POSSIBLE ADDITION BELOW
```

```
double againCurrTimeMillis = System.currentTimeMillis(); //POSSIBLE ADDITION to  
calc this again //ADJUST OR COMMENTOUT
```

```
double againSetupTimeMillis = 60000 + 60000; //POSSIBLE ADDITION to calc this  
again // ADJUST OR COMMENTOUT
```

```
startTimeMillis = againCurrTimeMillis + againSetupTimeMillis; //time for starting timers  
of smartdev processes; //POSSIBLE ADDITION to calc this again //ADJUST OR  
COMMENTOUT
```

```
//POSSIBLE ADDITION ABOVE
```

Additional readme note for running demo with several sims per run:

This simple demo code is built for schematic illustration to view along with text summaries and descriptions in a research manuscript and raw (and some processed and described) sample output. It is code for initial phase research, and the code (approximately, allowing for some frequency of random ~errors or random approximations) allows for the user to specify multiple sims per run of generated synthetic spatio-temporal info; although the code has been built and tested and used to produce sample output for schematic illustrations and one or multiple sims (e.g. 3 or 6 or maybe 40) per run, it has not been built or run/tested for larger or very large numbers of simulations per run. (As a related note, the simple demo code was written to account for some possible ~errors and slight random variations or approximations, although it has not been fully tested or tweaked to avoid less frequent run ~errors; the simple demo has been run so far with somewhat fast-forwarded time-scaling, mainly with user-specified 0.5 seconds computer time per demo timestep of 15-minutes place-based or 3-minutes coordinate-based.)