

orange box = GenServer

Report Generator

- One public function:
make_report(user_ids, date)
- Starts (and stops) all GenServers
Calculator Manager, Report Store,
18 Period Sum Stores
- Makes DB calls, fetches records
for users in batches (1000 users at
at a time), sends batches of records
to Calculator Manager
- Collects and returns final values
When finished Calculator runs =
total number of runs for valid
users, ReportGenerator sends
message to Report Store to collect
final values from Period Sum Stores

Calculator Manager

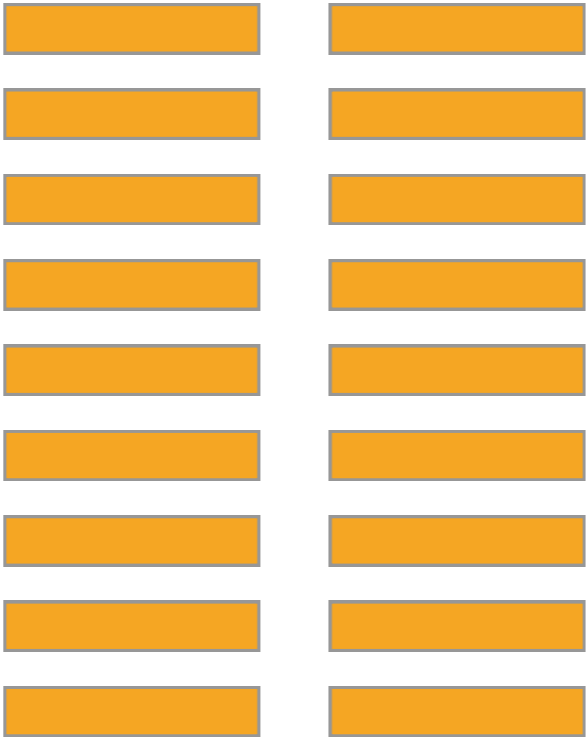
- Sets period start/end dates on
GenServer.start_link
- Recieves a batch of user records and
starts a Calculator run (via Task.start)
for each user

teal box = Task

Calculator

- One Calculator run per
user with valid records
- Each run:
 - Sorts records into nine
periods, then peforms FIFO
& LIFO calculations
 - Sends 18 values separately
when its finished: one value
to each period sum store.
 - Sends a message to
ReportGenerator to keep
tally of how many runs have
been finished

Period Sum Stores



Basic running total counters.
One for FIFO periods 1-9, LIFO
periods 1-9.

Report Store

- Collects values of all 18
period sum store counters
when all Calculator runs are
finished
- Formats and sends values
to Report Generator

- = Spawning process
- = Primary data flow
- = Secondary data flow