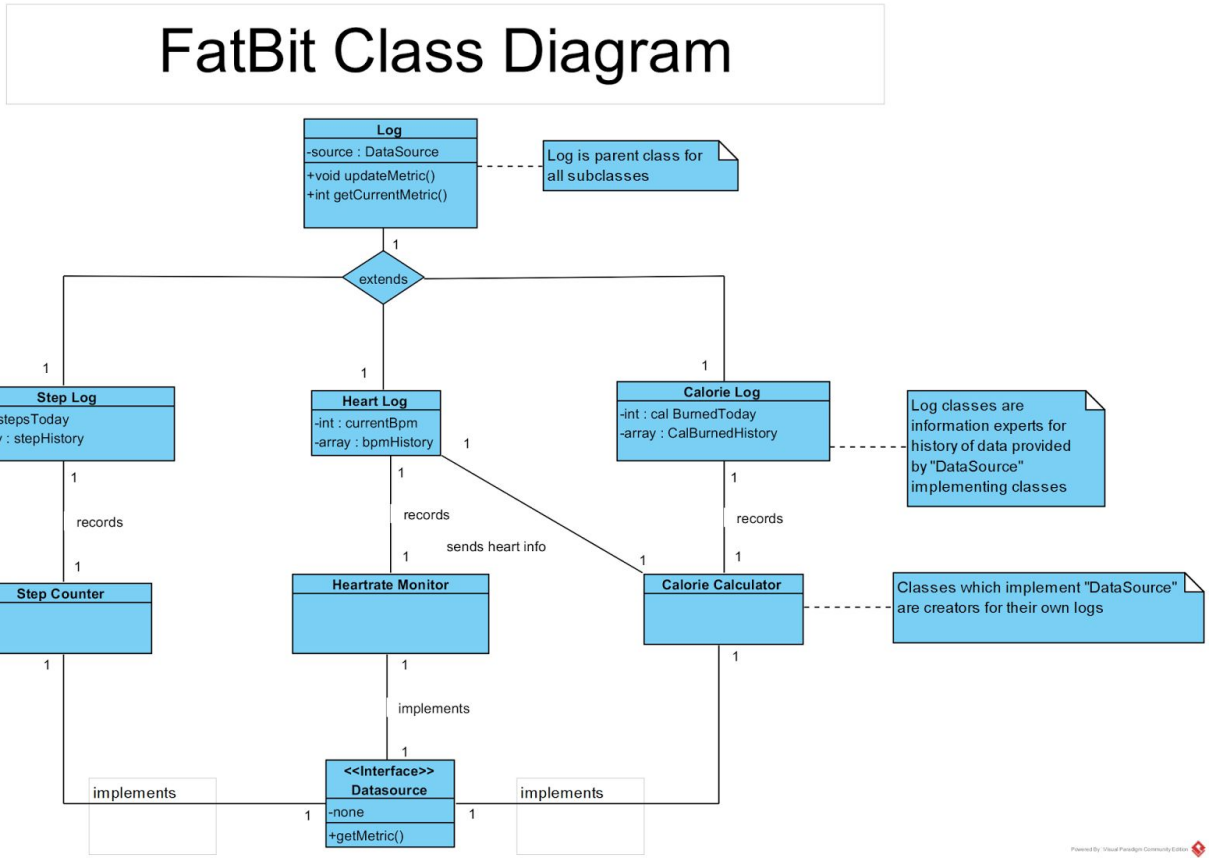
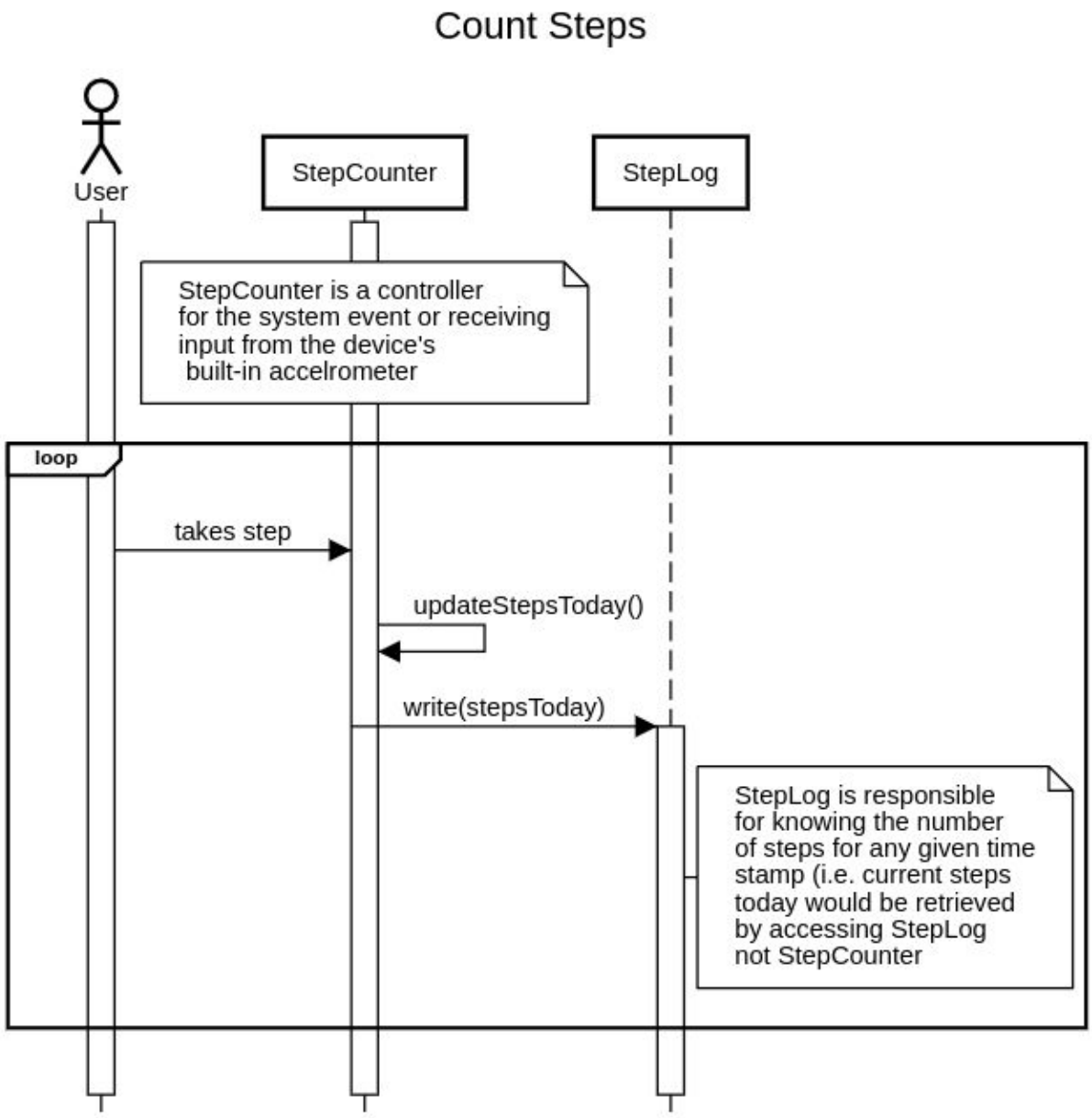
Deliverable 4: Class Diagram, Sequence Diagrams




Count Steps
User
StepCounter
StepLog
StepCounter is a controller for the system event or receiving input from the device's built-in accelrometer
loop
takes step
updateStepsToday()
write(stepsToday)
StepLog is responsible for knowing the number of steps for any given time stamp (i.e. current steps today would be retrieved by accessing StepLog not StepCounter

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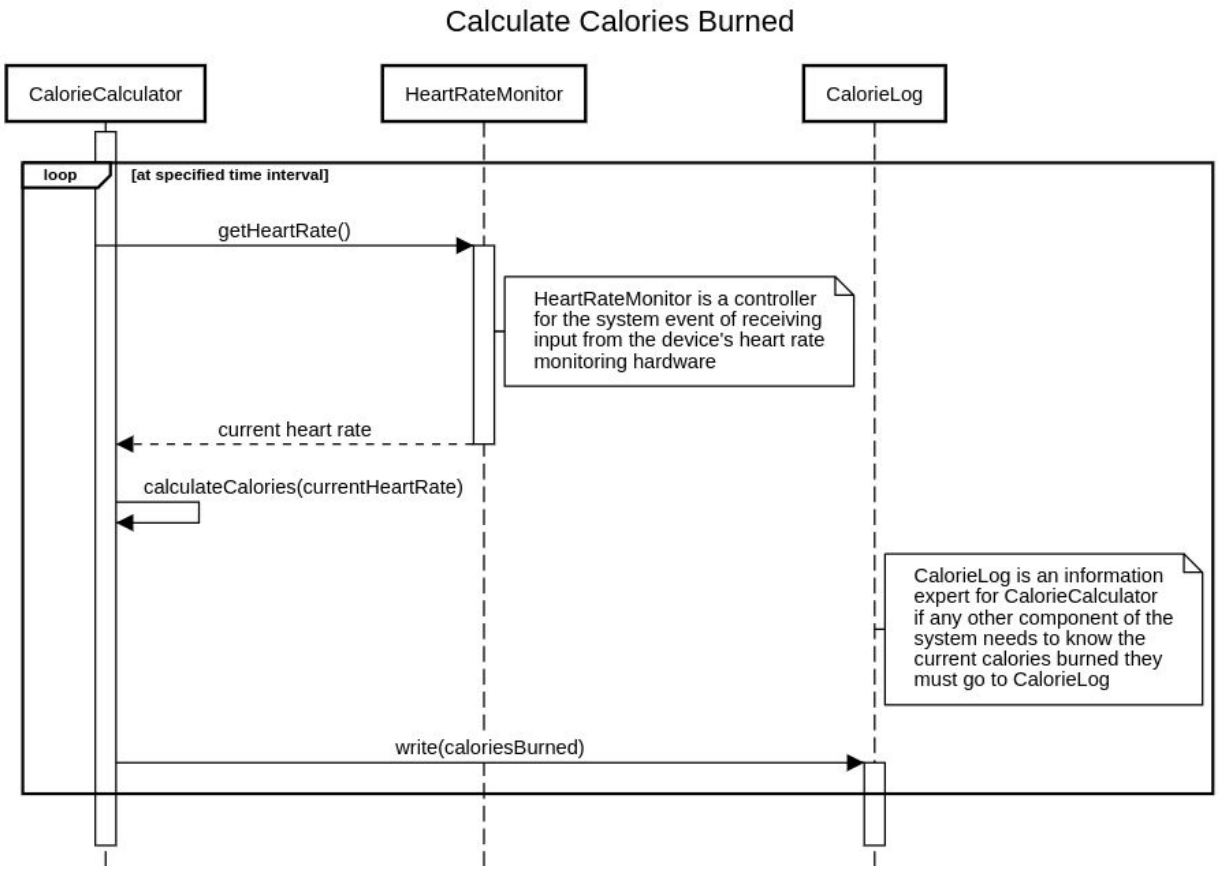
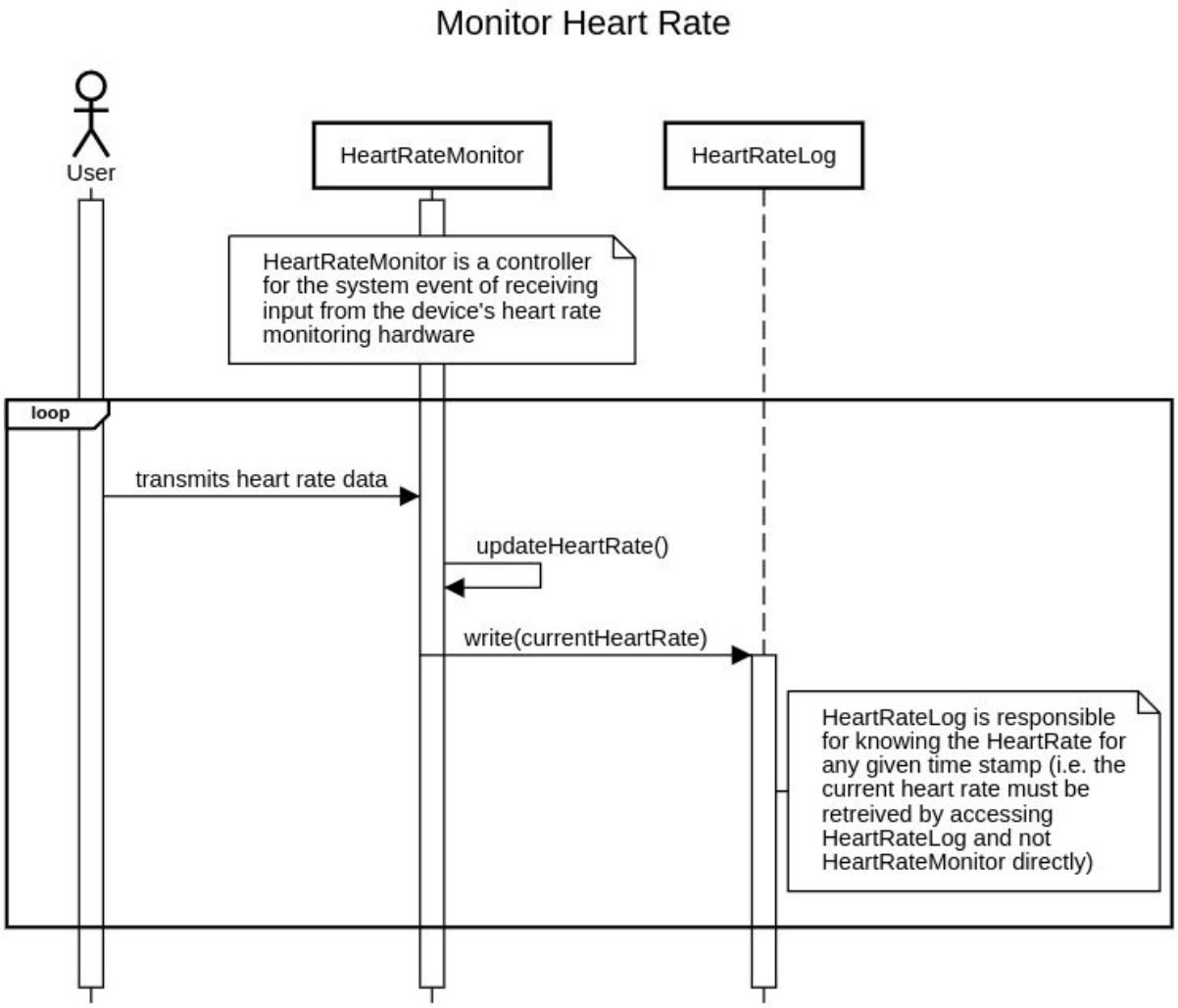
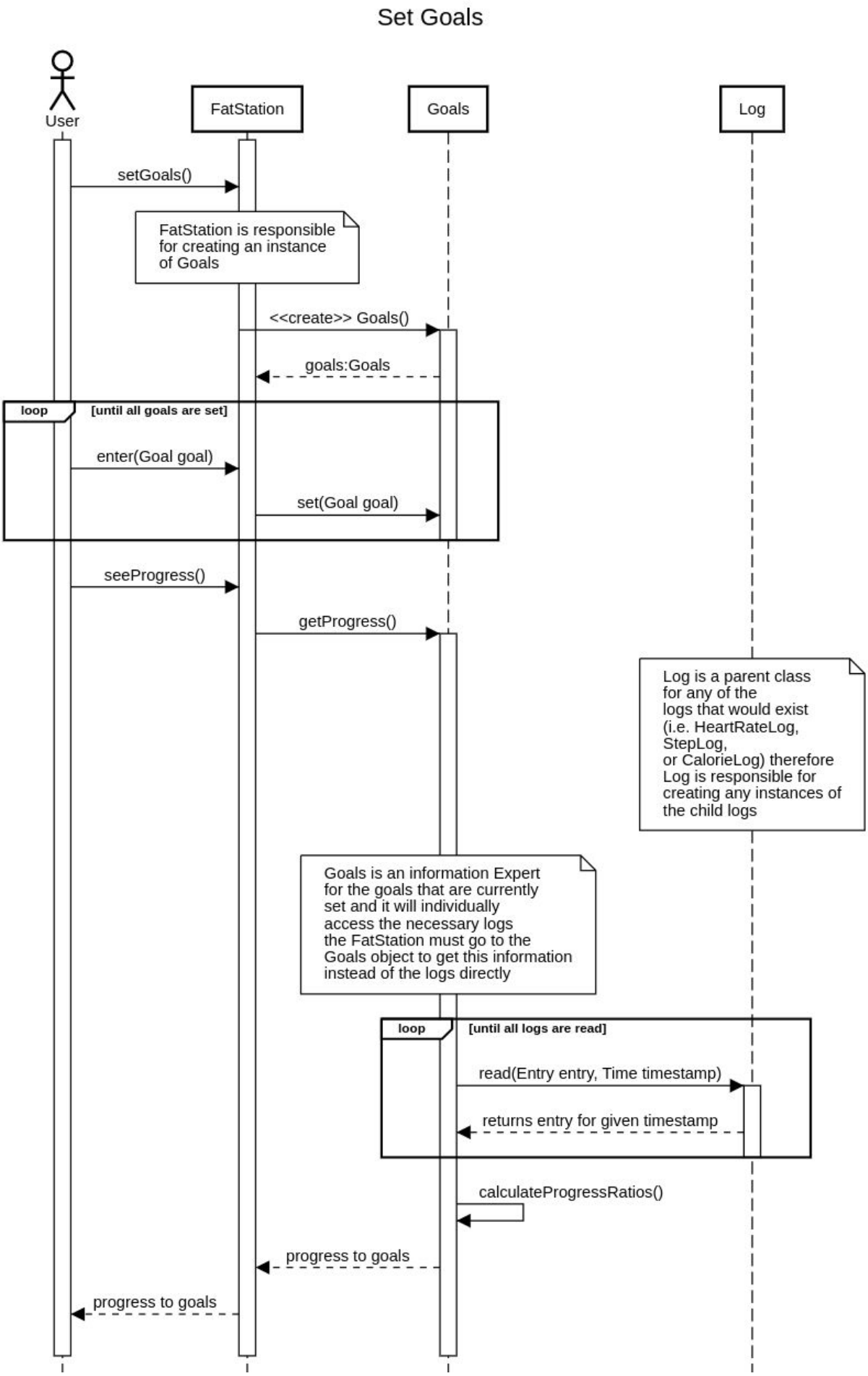



Monitor Heart Rate
User
HeartRateMonitor
HeartRateLog
HeartRateMonitor is a controller for the system event of receiving input from the device's heart rate monitoring hardware
loop
transmits heart rate data
updateHeartRate()
write(currentHeartRate)
HeartRateLog is responsible for knowing the HeartRate for any given time stamp (i.e. the current heart rate must be retreived by accessing HeartRateLog and not HeartRateMonitor directly)


Set Goals
User
FatStation
Goals
Log
setGoals()
FatStation is responsible for creating an instance of Goals
<<create>> Goals()
goals:Goals
loop
[until all goals are set]
enter(Goal goal)
set(Goal goal)
seeProgress()
getProgress()
Log is a parent class for any of the logs that would exist (i.e. HeartRateLog, StepLog, or CalorieLog) therefore Log is responsible for creating any instances of the child logs
Goals is an information Expert for the goals that are currently set and it will individually access the necessary logs the FatStation must go to the Goals object to get this information instead of the logs directly
loop
[until all logs are read]
read(Entry entry, Time timestamp)
returns entry for given timestamp
calculateProgressRatios()
progress to goals
progress to goals