**Solution Problem # 5.3 Preventive Maintenance program at ACME MACHINE SHOP**

Use Case Diagram

Activity Diagram
Design of class diagram

Machine
- machineId
- machineDesc
- machineTotalHours
- manufacturerId
- getMachineToHours()
- setMachineToHours()

1 has

Kept for

* Maintained by

1 has

Machine Records
- machineId
- date
- machineHoursWorked
- isWorking
- startMachineHour()
- stopMachineHour()

1 Referred to

PM task
- taskId
- taskDescription
- machineId
- maintFrequency
- elapsedHours
- computeElapsedHour()
- compareToSchedule()

1 Issued for

Work order
- woId
- woNumber
- machineId
- taskId
- dateIssued
- dateCompleted
- machineHours
- createWo()
- printWo()
- sendWo()
- closeWo()