­­Caleb Flegel – Final Project UML

**Town**

Map <string, string> residentList

Hospital \*mainHospital

Static Time currentTime

Int emergencyChnce

Town (int docNum, int nurseNum, int emergencyChnce)

~Town()

Void pullCitizens()

Hospital getHospital()

Static Time getTime()

Static string getFirst()

Void sickCheck

Void runWeek­

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**Time**

Int day

Int hour

Int minute

Time(int day, int hour, int minute)

Time()

Int getDay()

Int getHour()

Int getMinute()

Void operator() ()

Int toMinutes(Time inpTime)

Void advanceTime()

Time operator+ (Time time1, Time time2)

Time operator+= (Time time1, Time time2)

Time operator- (Time time1, Time time2)

Time operator-= (Time time1, Time time2)

**Hospital**

Vector <Provider\*> providerList

Static vector<Record> patientRecords

Static priority\_queue<Patient> patientList

Void toUppercase (string input)

Hospital()

Vector<Record> getRecords()

Static int getPatientCount()

Static Patient getPatient()

Static void pushPatient(Patient P)

Void addProviders(int doctors, int nurses)

Void newPatient (string lastName)

Bool searchPatient(string lastName)

Void printNameRecord(string lastName)

Static void addTreatment(Patient patient)

Time getAvgTreatment()

Bool patCheck(string name)

Void providerDuties()­

**Record**

String name

Int priority

Time totalTime

Record(Patient treatedPat)

String getName()

Int getPriority()

Time getTime()

Ostream operator<< (ostream out, Record rec)

**Nurse**

Nurse()

Void setTreatment()

**Doctor**

Doctor()

Void setTreatment()

**Provider**

Patient currentPatient

Bool available

Int remainingTreatTime

Provider()

Virtual void setTreatment()

Void treatPatient();

**Patient**

String surname

Int priority

Time startTime

Patient()

Patient (string name)

String getName()

Int getPriority()

Time getstartTime

Bool operator> (Patient pat1, Patient pat2)

Bool operator< (Patient pat1, Patient pat2)