Class Specifications

Class name:

Patients;

Documentation:

Definition:

A patient is someone who sets up a visit with either a doctor or a therapist.

Constraints:

A patient must be a Kent State student or an employee. They need to have a KSU ID, a gender, age, name and race.

Class name:

Personnel;

Documentation:

Definition:

Personnel refers to the people who conduct the visits. They diagnose and treat the patients.

Constraints:

Personnel are either a doctor or a therapist. There are only three doctors and two therapists. Each of the personnel have a schedule they must follow. They must also have a name

Class name:

AppointmentSlot;

Documentation:

Description:

AppointmentSlot refers to the time slots that an appointment can be made.

Constraint:

Each AppointmentSlot must have a start time and an end time.

Class name:

Appointment;

Documentation:

Description:

An appointment is meeting between a patient and either a doctor or a therapist at a specific time.

Constraints:

Each appointment must fill one appointmentSlot. It must not interfere with any other appointment. An appointment must be for one patient and either one doctor or one therapist.

An appointment can last for no more than 30 minutes and must fall within the personnelSchedule.

Class name:

Test;

Documentation:

Definition:

A test is a procedure that is done to diagnose a patient with an illness.

Constraints:

Each test must have a testResult. Each test must coincide with one visit and it must be linked to a patient.

Class name:

TestResult;

Documentation:

Definition:

A TestResult is resulting diagnosis that is obtained during a test.

Constraint:

Each TestResult must coincide with one test.

Class name:

Visit;

Documentation:

Definition:

A visit is when a patient comes to see a doctor or therapist to fix their sickness.

Constraints:

A visit must consist of only one doctor, one patient, one date and one time. It must generate one invoice and one diagnosis.

Class name:

Schedule;

Documentation:

Definition:

Schedule is a way to keep track of the days, times and which patients are seen by doctors and therapists. It also refers to the ability to make and reschedule a visit.

Constraints:

A Schedule must arrange visits, so they last for thirty minutes each. The schedule must spread out the visits throughout Monday through Friday, from 10 A.M. to 4 P.M.

Class name:

PersonnelSchedule;

Documentation:

Description:

PersonnelSchedule refers to the days and times that each doctor and therapist work in a week.

Constraints:

Each PersonnelSchedule must not overlap with another personnel schedule.

Class name:

Invoice;

Documentation:

Description:

Invoice is keeping track of how much each visit costs.

Constraints:

Invoice must coincide with a single appointment. Each Invoice must have a specific cost.

Class name:

Payment;

Documentation:

Description:

A payment refers to the money paid that is applied to the invoice.

Constraints:

A payment must coincide with a single invoice.

Class name:

Reports;

Documentation:

Description:

A report is the data that is generated from the visits, billing statements and corona virus updates.

Constraints:

A report must distinguish between money made from doctors and therapists for the semester. It must also track the corona virus cases throughout the US, Ohio and KSU. Reports must send an alert if corona virus is detected in Ohio or at KSU.