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Dr. Tucker | Computer Science 2

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Final Project Proposal

For my final project I want to create an appointment system for a doctor’s office. This software will take in a patient’s name, date of appointment, and doctor’s name. After input the software will store the appointment in a text file so the appointments will be saved after the application is stopped. The software will make sure no patients are scheduled for appointments with the same doctor within 30 minutes of each other. As the patients scheduled date approaches (2 weeks before) the software will send an alert so the patient can be contacted and reminded of the appointment. This software will use the internal clock and date in the computer so it doesn’t need to be input by the user.

To begin to solve this problem I will first start by making a class called Date which keeps track of current date and time and had variables and functions to keep track of appointment date and times. Next, I will create a class called People which will be split into derived classes named Patient and Doctor. These classes will just hold the Patient or doctor’s name. Next, I will create a class called Appointment which will call the derived People classes and Date class in a vector to hold all the patient’s appointment dates, times, and doctor’s names. I will need to create a lot of functions in Appointments to make sure there are no conflicts in scheduling. In the main/source I will create functions that output the appointment class vectors holding the names and appointment information to files and input them when the program is started.

The part of this project I am most worried about is learning how to use today’s date and time because I have never used or learned about that before. I am also worried about the 30-minute window where appointments can’t overlap. If an appointment is scheduled for 6:15 I can’t just put + or – 30 minutes because the hour will change once the minutes gets to 0 or 60.