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ITSE 1350

09/28/2025

Managing Systems Projects: PARS Case

In this assignment, I will describe my role as the project manager for the Patient Appointment Reservation System (PARS). This project came from my Chapter 2 interview with Valeria, my wife, who works as an orthodontist. I wanted to help her solve a recurring issue in her practice: patients often miss their scheduled appointments, and the current system of phone calls and paper notes is not enough to keep things organized. This has caused stress for her staff and lost revenue for the clinic. The purpose of this project is to design a software solution that reduces no-shows, saves staff time, and gives patients an easier way to manage their visits.

Project Scope

The PARS project will focus on scheduling and reminders. Patients will be able to set or change appointments online through a website or mobile app. The system will automatically send reminders by text or email before the appointment. Staff will have full visibility of the schedule and the ability to approve or adjust changes. While the system will store appointment data securely, it will not handle billing or detailed medical records.

The goals are clear: reduce missed appointments, improve communication with patients, and save staff time. Valeria told me her receptionist often spends nearly two hours each day on calls just to confirm appointments, which takes attention away from other tasks. By focusing only on scheduling, PARS avoids scope creep and stays within a manageable boundary, which Chapter 3 of our textbook explains is a key factor in project success (Kendall and Kendall 91).

Project Size

I consider this a **medium-sized project**. It will require building a database, designing a user interface, and using cloud hosting for access. While more complex than a small project, it is still manageable for a small team and not on the level of a large-scale hospital system. Chapter 3 defines medium projects as those that typically last several months and involve a focused development effort. I estimate the PARS system could be developed in four to six months.

Valeria also hopes the system will be ready before the end of the year, since her clinic gets busier during the holidays, which gives us a clear timeline.

Project Tasks

The main tasks will include:

- Requirements gathering with Valeria and her staff.
- Designing the database for patients, appointments, and time slots.
- Creating the user interface for both patients and staff.
- Building the reminder system for text and email notifications.
- Testing the system with staff and a small group of patients.
- Training staff to use the platform.
- Rolling out the system in phases, starting with new patients.
- Setting up a maintenance plan for bug fixes and updates.

For example, during testing, Valeria's staff could simulate a full week of patient appointments to see how the reminders work. This practical step will make sure the system solves the problem of missed appointments. These steps also follow the structured project management process

explained in Chapter 3, where projects move through planning, design, testing, and implementation (Kendall and Kendall 97).

Project Management Tools

Two project management tools will help guide this project:

- **Asana (Free Version):** Asana can manage task lists and deadlines. On the free plan, I would use it to assign responsibilities like database design, patient testing, or staff training. Dependencies can also be tracked, so tasks like training don't start before testing is complete.
- **Trello (Free Version):** Trello uses a simple Kanban board to track smaller, day-to-day activities. It would be especially useful for logging patient feedback or keeping track of small fixes during testing. Its simplicity makes it perfect for Valeria's small clinic, where not everyone has technical experience.

Both Asana and Trello are free to use at a small scale, which makes them practical options for this project. They balance structure with ease of adoption, and they avoid the high cost of larger tools.

Conclusion

The PARS project is designed to address Valeria's biggest frustration as an orthodontist: patients missing their appointments. By creating a scheduling and reminder system, the project will improve efficiency and communication while reducing lost time and revenue. This is a medium-sized project with a clear scope and timeline, supported by free project management tools like Asana and Trello. Chapter 3 emphasizes the importance of planning, communication, and

progress tracking in project success (Kendall and Kendall 99). By applying these lessons, this project will not only benefit Valeria's clinic but also give me hands-on experience managing a real systems project.

Works Cited

Kendall, Kenneth E., and Julie E. Kendall. *Systems Analysis and Design*. 10th ed., Pearson, 2020.