Problem Set:

We discussed pair programming in the lecture, and this assignment offers you a chance to try it.

1. Choose two user stories from your GEDCOM backlog.
2. Choose a pair programming partner from your GEDCOM team, along with one of your two GEDCOM user stories. Sit together, either physically together in the same place or virtually together using a screen sharing program such as Google Hangouts. (A single person may pair a program with more than one person if your GEDCOM has an odd number of people.)

As a team, pick three user stories. For each team member, implement one of the two user stories by yourself, noting the time it takes for you to solve the problem. The second user story implements it using the pair programming technique. Each person should be sure to fill the role of both driver and navigator. Note the time you spent implementing the user stories while working independently and while pair programming.

Deliverables:

Describe your experience implementing the two user stories, including the following details:

1. Identify your pair programming partner.
2. Identify the user story you implemented alone.
3. Describe your experience working alone on the user story. How long did it take to implement and test the story?
4. Describe your experience working with a pair programming partner on the user story. How long did it take to implement and test the story?
5. Describe the advantages and disadvantages for you and your teammate while pair programming. What worked well? What didn't work well?
6. Would you recommend pair programming? Why or why not?
7. Will you use pair programming on future GEDCOM user stories? Why or why not?

Solution:

1. **Identify your pair programming partner.**

   Pair programming partner – Jonathan Kim

2. Identify the user story you implemented alone.

   User Story 38
   List upcoming birthdays - List all living people in a GEDCOM file whose birthdays occur in the next 30 days

3. Describe your experience working alone on the user story. How long did it take to implement and test the story?

   Working alone on a user story takes longer to build and test than pair programming. When I encounter errors, I must handle them on my own. I must generate ideas on my own. Working alone also has certain advantages, such as not having to wait for my partner's answer and being able to execute on my own schedule. It also includes tension if I am unable to finish on time. It took me 2 hours to implement and test a narrative.

4. Describe your experience working with a pair programming partner on the user story. How long did it take to implement and test the story?

   Working in a pair to code produces new ideas for improving code quality. We make extremely few mistakes when coding. It is also an efficient method of learning. It took us 1 hour to implement and test our tale.

5. Describe the advantages and disadvantages for you and your teammate while pair programming. What worked well? What didn't work well?

   Advantages:
   - Pair programming produces unique ideas for shortening and tightening a program.
   - It is beneficial to have someone check through the code to ensure that it is of high quality and has few problems.
   - It is beneficial to understand how to interact and exchange information with others.
   - Problems are handled more rapidly by two people than by one.

- Many mistakes are captured when they are programmed.

Disadvantages:

- To obtain the greatest results from pair programming, both parties should be equally involved during implementation.
- If certain individuals do not work when inspected by another person, then pair programming will not benefit them.
- It also leads to some disagreements when both programmers attempt to execute their own ideas.
- It is a process in which one cannot just observe and ponder.
- It raises the project's budget when two people work on the same code.

6. Would you recommend pair programming? Why or why not?

Yes, I advocate for pair programming. It keeps the user away from other distractions like email, gaming, and social media. Working as a team on a regular basis helps enhance positivity regarding faults or defects. Furthermore, it encourages you to think beyond the box since even if you lose, your partner will assist you. In pair programming, each partner has their own set of strengths and shortcomings. Sometimes a pair's risky decisions lead to significant success in the software development process. By repeating this process, both people become brave and natural. So, for all the reasons stated above, pair programming is advantageous.

7. Will you use pair programming on future GEDCOM user stories? Why or why not?

On future user stories, I plan to employ pair programming. When two people collaborate, brainstorming helps to generate more ideas. Pair programming during the creation of a user narrative and test cases reduces the burden of completing it on time.