## AI Usage Report

Through the waterfall process, we utilized ChatGPT to help draft our formal Software Requirements Specification, create UML diagrams, refactor code, and produce test cases. During the process, there were circumstances where ChatGPT was helpful and circumstances where its output required correction and/or more detailed prompting to reach the desired result. For example:

- 1. Writing the Software Requirements Specification. We prompted ChatGPT to produce an effective Software Requirements Specification for our project by including the necessary requirements listed for the "Studdy Buddy" app. We had to input a few different queries with minor tweaks to come up with our final SRS. At first the document was too detailed and lengthy to fit the scope of this assignment and included unnecessary information that we either removed or adjusted. By modifying the output from ChatGPT we were able to produce a simplified SRS that fit the requirements of our project.
- 2. Creating UML diagrams. After completing the SRS, we used it along with the requirements set by the assignment to help create our UML diagrams. The initial output was missing several classes that were necessary for the project so we ended up prompting ChatGPT with more specific instructions to finally create a satisfactory UML to base our project upon.
- 3. Refactoring code. After completing the design process, we wrote our initial class/main implementations and utilized ChatGPT to improve the code structure and enhance its readability. Overall, there was not much we needed to change regarding refactoring.
- 4. Producing test cases. We shared our existing code to help with the creation of multiple test cases for several different scenarios in our project. After multiple iterations and

continued prompting we reached an acceptable set of test cases that effectively tested our implementation.