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IB Computer Science SL
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Criterion E: Evaluating the effectiveness of the solution

Success Criteria	Progress
The total cost of the plants should be less than the budget	I have met this success criteria as the client said “I noticed that the total cost of the plants was less than my budget” (Appendix B.4)
The program should be able to generate a report that shows the environmental standing of the garden, including the amount of CO ₂ sequestered, the amount of water saved	Program generates garden environmental report
The garden and recommendations should predict a reduction in water usage by at least 10% compared to traditional gardens and gardening practices.	Program predicts a water usage greater than 10% in client tests, as the client states “I believe that the application predicted about 15% reduction in water usage”(Appendix B.4)
The program should be able to recommend specific tips based on the specific needs of the plants	The program recommends specific tips based on the plants' needs
The program should be able to generate at least 1 plant for each garden	The program recommends a shopping list. As the client states “The program generated a customized shopping list and garden plan for (Appendix B.4)

The program should be able to recommend at least 1 plant that is native to the specified location to promote biodiversity and support local ecosystems	The program recommends plants that are within a radius of the garden's zip code.
Must provide users with a monthly maintenance schedule	Program accomplishes this as client states "I'm especially pleased with the program's ability to generate a monthly maintenance schedule"(Appendix B.4)
The program should be able to handle a multiple inputs, including different levels of maintenance (low, moderate, high), amounts of sunlight exposure (less than 4 hours, 4-6 hours, 6-8 hours, more than 8 hours), budget, and zip code	Program handles multiple inputs and generates a relevant output as the client states "I was able to input my zip code, budget, and level of maintenance"(Appendix B.4)

Future Developments:

During the client meeting, she suggested that the program should provide a more detailed maintenance schedule. Furthermore, the advisor agreed that more information should be included in the maintenance schedule. In the future, I could add a feature that provides specific steps on what and when to do something using a 7 day schedule. This ensures that users have all the information they need to maintain their garden properly. This improves user experience and ensures that the garden remains healthy.

In addition, the client also suggested that the environmental report should have more yearly or monthly data. This feedback is also valuable, as it will enable users to see the short-term impact of their garden on the environment. By providing more detailed environmental data, we can help users see the potential benefits of the garden in a more digestible (and shorter) time frame. At the moment the data provided on the sustainability and environmental impact of the garden is in the long term (20+ years) so this would serve as a good addition.

For more information, refer to Appendix B.4.

Word Count: 183