Assignment 9

Due on: 2020-04-01, 23:59.00


2. A human resources officer needs to store employee details for payroll processing. Suggest an appropriate data structure for storing employee details. Justify your choice.

3. Consider a scenario where a company needs to store customer orders. Suggest a data structure that can efficiently handle this scenario. Justify your choice.

4. A library management system needs to store books and their availability. Suggest a suitable data structure for this purpose. Justify your choice.

5. A stock market trader needs to store stock prices for different companies. Suggest an appropriate data structure for this task. Justify your choice.

6. A social media platform needs to store user interactions (likes, comments, etc.). Suggest a suitable data structure for this purpose. Justify your choice.

7. A restaurant management system needs to store menu items and their availability. Suggest an appropriate data structure for this scenario. Justify your choice.

8. A library management system needs to store library books and their availability. Suggest a suitable data structure for this purpose. Justify your choice.

9. A university management system needs to store student information and their course details. Suggest an appropriate data structure for this task. Justify your choice.

10. A financial planning system needs to store investment details and their performance. Suggest an appropriate data structure for this purpose. Justify your choice.

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Assessment: 40%

Submission: 60%

Class activity: 0%

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Additional Resources:

1. Lecture notes and slides from previous lectures.
2. Recommended readings for the week.
3. Practice problems and solutions.

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Instructor's Note:

- Consider the importance of choosing the right data structure for efficient problem solving.
- Practice analyzing the requirements of different problems and select the most suitable data structure.

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Assignment Evaluation:

- Effective understanding of the requirements.
- Accurate data structure selection.
- Justification of the chosen data structure.

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Resources:

- Online resources for data structures and algorithms.
- Books on data structures and algorithms.
- Online tutorials and videos.