

ASSIGNMENT 3: REFLECTIONS

STACK REFLECTION

Why is a stack bad for fair client service?

Answer:

A **stack** uses the **LIFO (Last-In, First-Out)** principle, meaning the **last person to arrive gets served first**. In client service environments (like hospitals, banks, or customer queues), this approach is **unfair** because:

- **Latecomers skip the line**, getting service before those who have waited longer.
- It creates **frustration and distrust** among clients.
- It violates the **principle of fairness**, where people expect to be served in the order they arrive.

Conclusion:

Stacks are efficient for specific computing tasks (like undo actions, backtracking), but **they are inappropriate for real-life service queues**, where **fairness and trust** are crucial.

QUEUE QUESTION

Why does FIFO build trust in healthcare?

Answer:

FIFO (First-In, First-Out) builds trust in healthcare because it ensures patients are **treated in the order they arrive**, which is seen as:

- **Fair**: Everyone is treated equally regardless of status or arrival time.
- **Transparent**: Patients can see that others are not skipping the line.
- **Predictable**: Patients can estimate their waiting time.
- **Ethical**: Especially important in public and emergency health services.

Example:

Imagine a sick person arriving early but being ignored in favor of newcomers—that would cause **anger, anxiety, and loss of trust**.