

Module 6: 6.2 Quiz (Greedy algorithm, Interval Scheduling)

Due Oct 23, 2022 at 11:59pm

Points 3

Questions 3

Time Limit None

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	1 minute	3 out of 3

Score for this quiz: **3** out of 3

Submitted Oct 20, 2022 at 3:36pm

This attempt took 1 minute.

Question 1

1 / 1 pts

The optimal greedy algorithm for Interval Scheduling problem uses:

- ☐ the job with the earliest start time.
- ☐ the job with the smallest number of conflicts.
- ☐ the job with the shortest length.
- ☒ the job with the earliest finish time.

Correct!

Correct.

Question 2

1 / 1 pts

We are given two jobs. The first one starts at moment s_1 and finishes at moment f_1 , and the second one starts at moment s_2 and finishes at moment f_2 . These jobs are compatible if:

☐ $s_1 \leq f_2$ or $f_1 \leq s_2$

Correct!

☒ $f_2 \leq s_1$ or $f_1 \leq s_2$

Correct.

☐ $s_2 \leq f_1$ or $s_2 \leq f_1$

☐ $s_1 \leq s_2$ or $f_1 \leq f_2$

Question 3

1 / 1 pts

What is the time complexity of the optimal greedy algorithm for Interval Scheduling problems with n intervals?

☐ $O(1)$

☐ $O(n^2)$

Correct!

☒ $O(n \log n)$

Correct.

☐ $O(n)$

Quiz Score: **3** out of 3