Oral Exam Rubric

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This rubric outlines the evaluation criteria for the oral exam based on four key learning outcomes.

Criteria 1: Operations (25 pts)

Rating	Point Range	Description
Exceeds	22-25 pts	Thoroughly and accurately
Expectations		describes operation with clear examples.
Meets	$17-21~\mathrm{pts}$	Explains operation with example
Expectations		and minimal prompting.
Partially Meets	$11-16 ext{ pts}$	Mentions some aspects of
Expectations		operation but lacks detail or
		clarity or example.
Does Not Meet Expectations	$010~\mathrm{pts}$	Cannot describe operation or gives incorrect information.

Criteria 2: Time Complexity (25 pts)

Rating	Point Range	Description
Exceeds Expectations	22–25 pts	Clearly explains complexity and can justify it.
Meets	17–21 pts	Explains time complexity for
Expectations		operation(s) with some justification and minimal prompting.
Partially Meets Expectations	$11-16 \mathrm{\ pts}$	Provides vague or partially correct time complexity description.
Does Not Meet Expectations	0–10 pts	Does not know or incorrectly states time complexities.

Criteria 3: Comparisons (25 pts)

Rating	Point Range	Description
Exceeds Expectations	22–25 pts	Provides insightful, accurate comparison with clear reasoning, identifying relevant trade-offs and use cases or examples that justify the comparison.
Meets Expectations	17–21 pts	Provides a generally accurate comparison with basic reasoning and identifies at least one relevant trade-off or use case.
Partially Meets Expectations	11–16 pts	Provides a limited or partially accurate comparison with unclear reasoning and minimal reference to trade-offs or use cases.
Does Not Meet Expectations	0–10 pts	Provides an inaccurate or missing comparison with no clear reasoning or relevant trade-offs.

Criteria 4: Usage Scenarios (25 pts)

Rating	Point Range	Description
Exceeds	22-25 pts	Accurately evaluates multiple
Expectations		usage scenarios with clear
		justification, explaining when the
		structure is appropriate or
		inappropriate with supporting
		reasoning.
Meets	17-21 pts	Correctly identifies appropriate
Expectations		or inappropriate use cases with
		basic justification.
Partially Meets	$11-16 ext{ pts}$	Identifies use cases but offers
Expectations		vague, incomplete, or partially
		correct reasoning.
Does Not Meet	$0-10 \mathrm{~pts}$	Gives incorrect or no reasoning
Expectations		about when or why the data
		structure should be used.

Total Points: 100