

Feature	Sub-Feature	Marks	Criteria	Obtained Marks
1. Route Data Representation (20)	Data Parsing and Graph Construction	10	Parsing data into graph (5), proper representation of vertices/edges (5).	
	Graphics Implementation	10	Visualization of nodes/edges (5), tooltips displaying routes details (5).	
2. Route Booking Feature (25)	Feature Implementation	15	Direct and connecting route display (10), input handling (5).	
	Graphics Implementation	10	Highlighting routes in the graph (5), visualizing layover feasibility (5).	
3. Shortest and Cheapest Route Finder (35)	Algorithm Implementation	25	Dijkstra's/A* implementation w.r.t time (10), Dijkstra's/A* implementation w.r.t cost (10), Correct path computation (5)	
	Graphics Implementation	10	Highlighting optimal routes (5), clarity of evaluated/non-evaluated nodes (5).	
4. Custom Route Paths and Preferences (10)	Feature Implementation	5	Filtering routes based on user preferences (5)	
	Graphics Implementation	5	Marking preferred ports visually (3), highlighting recalculated paths (2).	
5. Layover Management with Queue (20)	Feature Implementation	15	Smooth processing of layovers (5), smooth connecting route transitions (5). accurate data structure-based layover calculation (5).	
	Graphics Implementation	5	Visualizing layovers with dashed lines (3), layover information display (2).	
6. Advanced Route Generation (20)	Feature Implementation	15	Track of a multi-leg journeys (10), interactive path adjustments (5).	
	Graphics Implementation	5	Visualization of linked list with arrows (3), user-friendly path management (2).	

7. Graphical Query & Subgraph Generation (20)	Feature Implementation	15	Correct subgraph generation (10), effective filtering of ports/routes based on queries (5).	
	Graphics Implementation	5	Displaying active routes clearly (3), fading irrelevant nodes (2).	
8. Usage of Appropriate Data Structures (15)	Data Structures Evaluation	15	Proper use of graphs for route data (5), queues or any other structure for layover management (5), linked lists or others for multi-leg paths (5).	
9. Presentation and Demo Quality (15)	Functionality and Clarity	10	Demonstration of full functionality without bugs (10).	
	Visual and Usability Appeal	5	Clear interface and usability (5).	
10. GPT Prompts (5)	Effective Prompt Engineering	5	Smart Prompts SFML/Backend Implementation	
10. Bonus (5)		5	Any creativity other than the required functionality	

Total Marks: 185 excluding Bonus