

Draft Analysis Report:

Case Analysis and ERD Assumptions: Last Resort Hotels (LRH) needs a database to handle reservations, billing, events, and other hotel operations. The main objective is to streamline processes, improve efficiency, and provide management with clear, useful reports. The business narrative suggests that a single host could be billed for all guests, yet also allows each guest to pay individually, without explaining how or when these billing arrangements are decided. This complicates designing a system that must accommodate both group charges and individual incidentals (e.g., if someone checks out early).

The text also references deposits without specifying what triggers them, how they are collected, or if and when they might be refunded. It further provides no details on splitting a single event into multiple bills for different parties. Another challenge is room adjacency: the description only mentions “left” and “right” connections, leaving open the question of how to manage more complex layouts where multiple rooms might share walls or be combined into larger suites.

In creating our ERD, we assumed each hotel complex consists of multiple buildings, each building multiple wings, and each wing multiple rooms. We used a simple binary model for smoking (smoking vs. non-smoking) and store all bill-payers—individuals or organizations—in a single billing_party table. We also categorize every room under exactly one type (for instance, meeting or sleeping) and treat adjacency in a linear left-and-right fashion, without addressing more intricate possibilities such as partitions or rooms that can be converted or subdivided.

Team Divisions: This assignment began with each team member drawing up a separate list of potential tables. The group then met to decide which tables should appear in the final ERD. Rita produced the LucidChart diagram, while Jennifer and Patrick wrote the analysis report with the rest of the team contributing additional information and insights.

Details Left to a Later Step in the Project: We plan to refine and normalize our tables further once the exact adjacency structure and room-conversion rules become clearer. Currently, we handle different “usages” (meeting, sleeping, etc.) in a dedicated table, but the ability to merge or split rooms with wall-dividers may require additional changes. Similar refinements may be needed for deposits, partial group payments, and advanced billing terms once the business rules around those processes are better defined.