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11. **Introduction**

**Restaurant Reservation and Point of Sale System (RRPSS)** is a console-based application that facilitates restaurant tasks through a digitalized system, assisting with organising and managing processes like booking reservations, recording orders, printing receipts, generating sales reports and more. It is intended to be used by restaurant staff to allow an easier workflow of tracking various tasks, as much of the information is stored and managed by the computer as opposed to manual analogue bookkeeping. This report discusses the design principles and considerations of a particular implementation of the RRPSS, as well as demonstrating its effectiveness with testcases.

1. **Design Principles**

A well-designed application is one that shows modularity and strong ease of modification and expansion. In the RRPSS system, there are many different elements that are conceptually different entities, but there are many dependencies between them. The design principles implemented aim to manage these dependencies in a way to ensure that the core framework is future-proof, where changes or additions to certain subsets of the system will not result in any radical changes to the core system and its working principles.