Inspection Checklist for Team\_23

**Product**: Retail Billing System

Checklist to check for code’s correctness, organization, security, performance, documentation and functionality, to meet system requirements and standard

**General**:

* Does the code function as intended?
* Is the code well-organized and easy to understand?
* Is there any duplicated code that could be refactored?
* Have all unnecessary or commented-out code blocks been removed?
* Is the code modular and promotes re-usability?
* Are loop conditions and termination conditions well-defined and clear?
* Are all variable names meaningful and clear?
* Does the code handle edge cases correctly?

**Python-Specific**:

* Does the code pass pylint?
* Is the code properly formatted using black?

**Security**:

* Is user authentication and authorization handled correctly?
* If SQL queries are used are proper placeholders used to prevent SQL injection?

**Documentation**:

* Does each module have a docstring explaining its purpose and functionality?
* Does each class have a docstring explaining its purpose and functionality?
* Does each method have a docsting explaining its purpose and functionality?
* Is any special case behavior documented?
* Are inline comments used to provide clarity where necessary?

**Performance**:

* Is the code optimized for performance, with no obvious bottlenecks or inefficiencies?
* Can any computational or database operations be further optimized?

**Testing**:

* Is the code structured to be easily testable, with well-defined functionality?
* Are there comprehensive tests covering different features and scenarios?
* Do the test cases adequately check the code's functionality and edge cases?