**Project 1 Design Document**

Objective: To understand how to develop software by constructing a basic store management system.

Task 1: Write two possible use cases for each user story: one is the common case and the other is the exception.

1. “As a user, I want to add a new product into the system.”

* Common case example: Adding a product successfully; unique ID, > 0 stock, > $0 price
* Exception case: Product ID is out of order, Product ID already is in the system

2. “As a user, I want to add a new customer into the system.”

* Common case: Adding a customer; unique ID, name doesn’t contain numbers
* Exception case: Duplicate customer ID, numbers in name.

3. “As a user, I want to add a purchase from a customer into the system.”

* Common case: Adding a purchase, item is in stock.
* Exception case: Using a customer ID/product ID that doesn’t exist.

Task 2: Design UI windows and widgets the system should display in each use case.

Task 4: Implement the use cases

Task 5: Test the system with each use case

Store manager main view:

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Description automatically generated

**Add Product UI**

Main Screen:

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**Add Product UI**

Successful Add:

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Description automatically generated

**Add Product UI**

Unsuccessful Add with Error Message:

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Description automatically generated

**Add Customer UI**

Main screen:

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**Add Customer UI**

Successful Add:

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**Add Customer UI**

Unsuccessful Add with Error Message:

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Main Screen:

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Successful Add: **A screenshot of a cell phone

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**Add Purchase UI**

Unsuccessful Add with Error Message:

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Task 3: Design the database physically with 5 customers, 5 products, and 10 purchases

5 Customers:

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5 Products:

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10 Purchases:

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