CSE 474 SQAP

Product Title: Inventory Management Software

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Prepared For: Green Grocers Inc.

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Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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# Revision History

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| --- | --- | --- | --- |
| Date | Update(s) | Version | Author |
| 2024-10-04 | -Initial Draft  -Title Page  -Revision History  -Table of Contents  -Table of Figures  -Section Stubs | 0.1.0 | David Nelson |

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# 1. Scope and Purpose

The purpose of this plan is to:

* Define the SQA organization, tasks and responsibilities for the project
* Ensure the project is able to meet the standards outlined in the software development contract
* Define the operational needs defined in the Concept of Operations (ConOps)
* Provide reference documents and guidelines to perform the SQA activities
* Provide the standards, practices and conventions used in carrying out SQA activities
* Provide the tools, techniques, and methodologies to support SQA activities, and SQA reporting

This SQAP applies to the development of the inventory management software, covering all phases of the software development lifecycle, including planning, requirements analysis, design, implementation, testing, deployment, and maintenance. The plan addresses quality assurance activities related to:

* Functional and non-functional requirements verification
* Code reviews and adherence to coding standards
* Testing (unit, integration, system, and acceptance testing)
* Risk identification and mitigation
* Compliance with applicable standards and regulations

This plan does not include:

* Hardware quality assurance activities
* Third-party software or systems not developed within the scope of this project
* Non-software-related project deliverables (e.g., training materials, user guides)

# 2. Definitions and Acronyms

The following terms will be important for understanding the document going forward:

|  |  |
| --- | --- |
| Term | Definition |
| Software Quality Assurance (SQA) | A systematic process to ensure that the software being developed meets specified requirements and quality standards through planned activities such as audits, reviews, and testing. |
| Concept of Operations (ConOps) | A high-level document that describes how a system will operate in its intended environment, providing an overview of the system's goals, user needs, operational scenarios, and overall functioning. The ConOps helps guide the design and quality objectives of the software. |
| Verification and Validation | The process of ensuring that the software meets the specified requirements (verification) and that it fulfills its intended purpose (validation), through activities like testing, reviews, and inspections. |

# 3. Reference Documents

The following documents have been used as a reference for the creation of this SQAP:

* Software development contract between Green Grocers Inc. and Innovative Solutions Inc.

# 4. SQA Plan Overview

## 4.1 Organization and Independence

## 4.2 Software Product Risk

## 4.3 Tools

## 4.4 Standards, Practices, and Conventions

## 4.5 Effort, Resources, and Schedule

# 5. Activities, Outcomes, and Tasks

## 5.1 Product Assurance

### 5.1.1 Evaluate Plans for Conformance

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# 6. Additional Considerations

## 6.1 Contract Review

## 6.2 Quality Measurement

## 6.3 Waivers and Deviations

## 6.4 Task Repetition

## 6.5 Risks to Performing SQA

## 6.6 Communications Strategy

## 6.7 Non-Conformance Process

# 7. SQA Records

## 7.1 Analyze, Identify, Collect, File, Maintain, and Dispose

## 7.2 Availability of Records