Beverage Vending Machine Documentation Template Paper

CSC 414 Software Design

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1. **– Introduction**

This document outlines the specifications and details on the use and functionality of the Beverage Vending Machine software version 1.0 using the Python3 language. The software is designed to implement a software-strict output rather than using hardware to vend a physical can of beverage, which can later be refined to implement hardware that will dispense a physical beverage using a physical machine.

**1.1 – Program Purpose**

The purpose of this software is to allow the user to make a selection on which beverage they would like to dispense given the user has met the monetary requirement for the price of the beverage. The program will then display the price for each beverage and request the user to pay the designated price before the system will output the beverage. If the user has inputted more money that the price of the beverage, then the system will dispense the difference to the user. If the user has not inputted enough money to meet the price requirement, the system will display the remaining balance needed before the machine will dispense a beverage. The system is also designed to keep track of inventory and display a “SOLD OUT” indicator for beverages that are no longer in stock.

**1.2 – Document Overview**

The outlined document provides a brief overview into what the system is and how it is intended to perform in section 1.0, citations and descriptions into the references used for implementing certain algorithms and packages within the system in section 2.0, the requirements that are to be met to be considered a complete and optimal system in section 3.0, the design implementation that was used in formatting and laying out the code as well as the GUI in section 4.0, testing overview found in section 5.0, and finally the table that describes the user’s available choices along with a state diagram that outlines the software’s behavior in the appendix. Final key results are also documented alongside the state diagram and the table in the appendix.

1. **– References**
2. **– Program and System Requirements**
3. **Program Design Implementation**
4. **Program Testing**

**Appendix**