1BM18CS010

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**Coffee Vending Machine SRS**

The Objective of the system is to prepare a coffee vending machine for commercial purposes. The system will be able to prepare coffee by processing all its required ingredients. Users will be provided with sophisticated and easy to use user interfaces.

Coffee grounds are put in a paper or metal filter inside a funnel, which is set over a glass or ceramic coffee pot, a cooking pot in the kettle family. There are several different styles of coffee makers using a variety of different brewing principles. Cold water is poured into a separate chamber, which is then heated to boiling temperature before being poured into the funnel.

Money Box: Knows amount of money put in; Give change; Knows price of coffee; Turns front panel on and off.

Front panel: Captures selection; knows what to mix in each; Instructs mixer when to mix.

Mixer: Knows how to talk to the dispensers.

Dispenser [cup-, coffee powder-, sugar-, creamer-, water-]: Knows how to dispense a fixed amount, knows when it is empty.

# Features:

* Small carbon footprint
* Energy saving advanced power management system
* Comprehensive drink range
* Simple user interface
* One touch servicing

# Working:

Coffee vending machines are easy and straightforward. They act similarly to a tabletop coffee machine or even a drip coffee machine. Making coffee is as simple as combining coffee beans or grounds with hot water and mixing with milk and sugar, and a hot drink vending machine does the same thing.

# Functions:

* Add heat: To heat the coffee we could use an external hot plate to heat one or multiple walls of the water reservoir and thus heat the water through surface convection.
* Direct Water: The fluids could be directed from the water reservoir to their final destination via tubing, gravity reed, and pump.
* Contain Water/Coffee: To contain the water and coffee we could use one reservoir, two reservoirs or a funnel. If one reservoir was used for both the water and coffee container, our design would be a percolating or French press coffeemaker.
* Reduce Noise: To reduce the overall noise we consider two options: noise dampening material and internal brew mechanism. To lessen the noise produced by our designs we could fill or cover the outer shell of a noise dampening material. We could also keep the brew mechanism, whether it is drip spout.

# Maintenance:

When it comes to how coffee vending machines operate, it's not only about the coffee; it's also about the machine's upkeep and maintenance. Suppliers can clear the cash drawer, reconcile the proceeds against sales, empty the waste grounds, refill ingredients and cups, and generally maintain the interior and exterior of the building with frequent visits.