A laundromat located in Palm Springs, CA has been flourishing through the pandemic because of its great location, variety of detergents that it has to offer, and its WiFi that customers are able to connect to while they wait for their laundry to finish. However, the owner continues to receive complaints from the customers about how old and outdated the washing machines (WM) are. The owner is looking to upgrade to new washers that allow more cycle options and integrate more technology, as the owner is also thinking about adding contact-less payment methods and a mobile notification system for wash completion, in order to reduce gathering inside the store and abide by local regulations.

Currently, the washing machines only have 3 basic modes: regular, heavy, and delicates. The new washers will include basic modes such as these, in addition to more advanced modes such as quick wash, whites, and a mode for bulky items. In addition to this, the new washers will also be able to accept contact-less payment methods and connect with a messaging system to send notifications to the customer’s phone to let them know when their cycle is complete. The owner does not want to bite off more than he can chew with this overhaul, so he has agreed to take a phased approach to the upgrade by focusing on getting the upgraded washers in and running before implementing the contact-less payment methods and mobile notification system. The owner has also agreed to participate in a series of workshops to define the scope for the minimum viable product (MVP). The owner has agreed to installing the new, upgraded washers in phase 1, implementing the contact-less payment methods in phase 2, and saving the mobile notification system for phase 3.

During the requirements gathering workshop, additional features to the washing machine were discussed that are a must have for the owner, as he believes they will set him apart from the competition and increase profits. The owner mentioned that it is important to him, based on customer feedback, that the new washing machines have a custom mode that will allow the customer to choose their own settings for the cycle, such as fill level, water temperature, and soil intensity. The owner believes that this will help set him apart from his competitors, as the majority of laundromats in the area have very outdated washers with limited functions. The owner also highlighted the importance of having locking doors integrated into the designs. His current models do not have a locking door function, and he believes that implementing one will increase customer satisfaction by allowing them to not worry about their items being stolen. Lastly, the owner mentioned that he would like for the machines to be able to record data of usage and payment method type, as he believes these metrics can help him better serve his customers. The owner seems to have a very good grasp on who his customers are and what they want, which speaks to his success.

The owner is also interested in adding a cleaning mode to the new washing machines that will allow him to easily clean and sanitize the washers come closing time each day. The owner believes this will not only improve the efficiency of his closing routine, but will also be a great selling point to customers, as they can rest assured that the washers are properly and thoroughly sanitized each day.

Requirements (with Priority Weights in parentheses; 1 = highest; 10 = lowest priority):

R1 (1) The WM shall provide 3 different modes of washing: Regular, Heavy Duty and Delicate Wash.

R2 (1) The WM shall accept coin and card payments.

R3 (2) The WM shall have a locking door function.

R4 (2) The WM shall provide additional modes such as quick wash and whites.

R5 (3) The WM shall provide a custom cycle that allows customers to choose their own settings.

R6 (4) The WM shall incorporate a cleaning mode for sanitization.

R7 (6) The WM shall record machine use data.

R8 (8) The WM shall record coin use data.

R9 (8) The WM shall record card use data.

Constraints;

C1 The WM will only accept coin or card payments.

C2 The WM will only interact with the customer through the UI (no mobile app).

C3 The WM will only record individual data, no data sharing between machines.

Out of Scope Features;

N1 Contactless payment options

N2 Mobile App creation

N3 Text message service integration