

Abstract

CrunchCraze is innovative machine designed to pack nuts according to customer preferences, integrating a production line with user friendly control panel. Customers can select their , and then or 250g for 25 desired weight choosing between two options 150g for 15 choose the number of types they want up to 3 if 150g and up to 5 if 250g, they can also select seasoning options like salt, slat and pepper, or none. The machine's significance lies on enhancing customer experience by providing a customizable, efficient, and consistent packing process, thus improving operational efficiency and meeting the demand for convenience in food retail. Key aspects include customization, inventory management with low-supply alerts, and a user interface that guides customers via an LCD screen. The main objectives are to automate nut packaging, offer customization, implement an efficient inventory system, and enhance customer satisfaction. The development process involves requirements analysis, design, implementation, testing, and deployment. While similar vending machines exist, CrunchCraze is unique in its high customization and integrated inventory management system.