

Developing a Computer Software for Blending Black Tea

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Tea is manufactured from the young shoot of the tea plant (*Camellia sinensis* L.). Black tea is manufactured by subjecting the fresh tea leaf in to withering, rolling, fermenting and drying. Quality of black tea varies with variety of tea, manufacturing process, region, climatic conditions etc. Price of black tea varies with its quality. Buyers of the bulk tea blend tea from various manufacturers to make the quality and price of the tea in the retail market fairly consistent. Quantity of tea from various manufacturers that should be added to make a particular blend is decided arbitrary by tea tasters based on the sensory evaluation of samples of tea from individual manufactures. Initially, a trial blend is prepared and check whether the intended properties are met. This process is time consuming and laborious. Therefore, user friendly computer software was developed using JAVA language to make the tea blending process convenient and accurate. Programing was done using matrix algorithm. Price and rank data (five point hedonic) on sensory evaluation (color brightness, strength and aroma) of initial tea samples and desired price and rank data (five point hedonic) on desired sensory properties of the intended blend are the input variables. The developed software is to be tested in commercial blending process and further fine-tuned.

Keywords: Black tea, Blending, Computer software, JAVA, Matrix algorithm