# **Abstract**

It is a well-known fact, that accurate control and management of inventory of an organization is one of the foremost tasks, in order for it to reach its vision and mission. ‘Inventory’ can be defined as the objects or goods that are sold, distributed or used by an organization. Primary objective of management of the inventory is to determine/control stock levels within the physical distribution system. Inventory management involves processes that identify inventory requirements, setting targets, providing replenishment methods, reporting inventory status, and handling all functions related to the tracking and management of goods. Controlling the inventory mainly focuses on using the inventory efficiently keeping up with changes in demand to avoid overstock and avoiding item spoilage.

University of Colombo School of Computing (UCSC), a unit of University of Colombo is a non-profitable organization, which is currently experiencing some challenges regarding their inventory management and control, such as troubles of cross-referencing the locations of inventory items, inaccurate need analysis, and uncoordinated purchasing processes that most of the times cause duplication of records and data redundancy. In addition to that, there are certain issues identified as too much paper work and unawareness on available stock. Several studies have shown that paper based supplies records are far from a good solution whenever timely reports are a major requirement.

The goal of this research is to identify needs specified to the organization to design and develop a web-based inventory control platform, which can be actually initiated in UCSC, which should be capable of inventory registration, ordering and distribution with maximum efficiency and reliability, and efficient stock controlling.

The study is done in a qualitative manner. It mainly follows SDLC. Interviews and document reviews were effectively used to gather data and the system designing is done using the prototyping methodology.