



**JEWELRY PRODUCTION SUPPORT & EXPORT
SYSTEM FOR THE
AMS INTERNATIONAL (PTE.) LTD.**

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Abstract

The objective of this work was to develop a fully automated Jewelry Production Support & Export System for the AMS International (Pte) Ltd .. AMS is a jewelry manufacturing company for European market. Their production related data flow is heavily depending on a paper based system which is highly inefficient and unsecured. Therefore, the management of AMS has requested to develop an automated production support system which gives an efficient, reliable and secured data flow throughout the production process. This work was done as an individual project as a partial fulfillment of MSc in Information Technology.

Initially a couple of formal meetings were organized with the management and other stakeholders of the proposed system to identify the basic requirements, boundaries and to get an overall idea about the existing manual system. Then a detailed requirement gathering was done within the identified boundaries. The methods used to collect the data were interviewing, observing their manual system as well as their business process and referencing necessary documents that are useful for the proposed computerized system. Then the Unified Modeling Language was used to model the existing and proposed systems and Microsoft Visio 2003 was used as a tool for modeling the system.

The proposed Jewelry Production Support & Export System was identified with five main sub systems as Design Pricing, Order Confirmation, Stock Control, Production & WIP and Invoicing & Export Sub Systems. The proposed system was developed using Microsoft Visual C# Express Edition and the database was implemented using MySQL.

Software inspection and black box testing methods were used to evaluate the developed system. Using activity diagrams, I generated the test cases which test real outputs against inputs; check the error messages, user friendliness of the each form



navigations, menus, entering text, buttons, reports as well as accurate link between database.

Finally, conclusions about the operations of the JPS&ES were drawn and future developments were discussed.