Software Requirements Specification (SRS) for the Inventory and Annual Procurement Plan Stock Availability Monitoring System

**1 Introduction**

* 1. Purpose

This software project shall attempt to help the University of the Philippines Tacloban College’s Supply and Property Services Office (SPSO) stream line its operations and transactions by trying to introduce a local server based website that features a database system for all the records generated by the office. It will aim to automate a good portion of the processes and transactions of the SPSO, thus reducing their work in keeping records, generating the reports they need based on the data they have gathered, and processes involved in completion and validation of transactions.

* 1. Scope of the Project

This software project, at its inception, is intended to be used only by UPVTC’s Supply and Property Services Office (SPSO). The software, which will be a web-based database system, will be deployed in a server within UPVTC. Aside from keeping records for the SPSO, it shall facilitate convenient completion and validation of processes that can span across multiple other departments /offices in UPVTC. Functions of the SPSO can be divided into three, namely:

* Annual Procurement Planning (APP)
* Purchasing of Supplies and Property
* Inventory and Stock Monitoring

**2 Overall Description**

2.1 Product Perspective

It will be the first web-based database system for the UPVTC SPSO to be developed. Future patches for improvements and/or fixes to the software for a period after deployment shall be released as necessary.

2.2 Product Features

The software will have the following features:

* Software is in the form of a web-based application. This will enable users across different departments/offices to use the system with a web browser, eliminating the need to install a client application in any workstation connected to the system.
* Forms and letters involved in the SPSO’s processes can be generated and processed in a web-based fashion. Since this is the case, required procedures performed upon the forms (e.g. signatures, information inputs) by officers from different departments/offices can be done faster and more efficiently.
* Faster retrieval of information from the records via use of computer database at any desired time.
* Utilizes a user account system. Certain actions that can be performed will only be available to appropriate user accounts.
* System logs are generated in every action for reliability.
* Data stored in the program is secured.
* Specific webpages that involve certain forms feature a capability to save forms with data generated from the database into their current workstations in an Excel document file format (.xls) and/or in Portable Document Format (.pdf).

2.3 User Classes

Staff/personnel from the SPSO will be the main users of the system. Other certain staff/personnel from other divisions/offices that are involved in the processes and transactions of the SPSO (e.g. Dean, Division Head) will also have access to the system, but with limitations. Other users will have no access or right to operate the software.

2.4 Operating Environment

A server computer will serve as the database server and possibly as a file server. The server will have to install MySQL, Java (JDK and JRE) and Apache Tomcat. To use the system website from a connected workstation, only a web browser has to be installed (e.g. Internet Explorer, Mozilla Firefox, Google Chrome) into its operating system, which can vary. Microsoft Excel or any other software capable of opening and modifying Excel (.xls) files will be needed. Adobe Reader or any other software capable of opening PDF files are also needed.

2.5 Design and Implementation Constraints

Only one user can login to the software using a specific browser. Multiple logins for the same account will be disallowed.

2.6 User Documentation

After the approval, testing, and during deployment, the developers must provide the necessary documents such as the user manual and all the software project documentation. Also the necessary programs to be used so that the software runs properly should be given to the UPVTC and the SPSO.

**3 System Features**

3.1 View reports in their respective formats

3.1.1 Description and priority

Description and priority allows user to view reports in any format of their choice. This feature is given a high priority since it is practical for the user to view reports in whichever format preferred, that is, the actual presentation of the report he/she wants to view.

3.1.2 Stimulus/ Response Sequences

If the user clicks the appropriate button for viewing the file, a popup component is then displayed prompting the user of what format he desires.

3.1.3 Functional Requirements

In order to be able to view reports, the user must specify a valid file and then he must have navigated to the page where the button is visible.

3.2 Update/Edit entries in their respective formats

3.2.1 Description and priority

The user is allowed to edit certain data from various reports, which eventually updates the edited report. This feature is given a high priority since the user easily edits data with no hassle, which is part of the mission of the IAPPSAM application.

3.2.2 Stimulus/ Response Sequences

The user chooses what file to edit. He/she then is free to edit data from that report. A save button is provided once the user is finished editing.

3.2.3 Functional Requirements

In order to be able to edit reports, the user must specify a valid file and then he must have navigated to the page where the selected file is visible. On that page, he/she may start editing, with consent of pressing the save button.

3.3 Retrieve data through search capability

3.3.1 Description and Priority

The ability to search through the system data is given high priority because this will allow users to access files faster than the previous manual method.

3.3.2 Stimulus/Response Sequences

In order to search, a user must input a search keyword in the search field in an appropriate page. The search engine will search through the data and present an output report for the user’s viewing.

3.3.3 Functional Requirements

The user must be successfully logged in. The searching proper only requires a keyword and will return an empty report if a keyword match is not found.

3.4 Saving Reports to Different Formats

3.4.1 Description and Priority

The ability to generate and save reports in different formats is given high priority. A generated report can be saved in two forms, Excel(“.xls”) and PDF(“.pdf”). The two formats address needs that the users have voiced.

3.4.2 Stimulus/Response Sequences

In order to use this feature, the user must click the save button in the software, from there the user will choose what file format he will use in saving his desired report. The software has 2 file formats namely: Microsoft Excel format (.xls), and Adobe format (.pdf). The user can choose what format he will use depending if the file format is supported by report he is trying to save.

3.4.3 Functional Requirements

For the user to save the reports in his desired format, all the needed information must be present in the report. Each report can only support some file formats. To read/ view the saved report, Microsoft Excel, Adobe Reader must be installed in the computer used by the user.

**4 External Interface Requirements**

User Interfaces

To minimize the efforts of the user in using the software, the software used mostly buttons to execute most of its commands and combo boxes are used to display the user’s options. To input data is done using importing files or by encoding. Auto-fill for some entries will also be an added feature in the interface.

**5 Other Non-Functional Requirements**

Security Requirements

The software product ensures the user that the data being manipulated/processed is highly secured. There is identity authentication in the form of a username and password scheme. A default username and password is specified and can be changed by the user sooner or later for security purposes. Username and password must match to be able to access the system and its database.

User Authentication

Username and password are required to login into the system. Also, dual login will not be allowed to avoid security risks and inconsistencies. Only SPSO personnel will be given login information.

**6 Other Requirements**

List of Terms:

UPVTC – University of the Philippines Visayas Tacloban College

SPSO – Supply and Property Services Office

APP – Annual Procurement Plan