

SCHULICH
School of Engineering



DEPARTMENT OF ELECTRICAL
AND COMPUTER ENGINEERING

SENG 696 Agent-Based Software Engineering

Software Acquisition Request System

Assignment 1A – System Specification

Group # 6

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Software Acquisition Request System

System background and goal

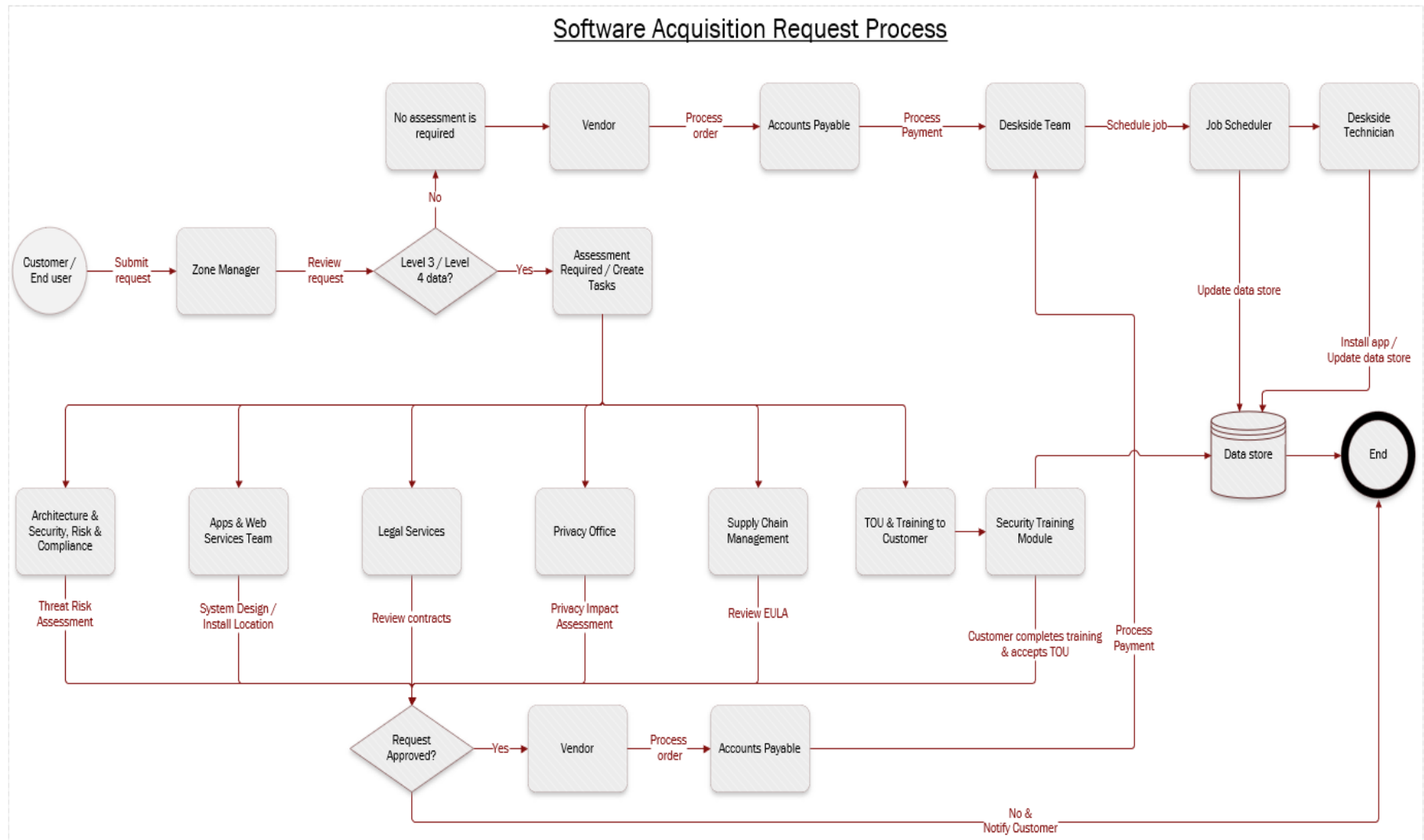
Software Acquisition Request System allows customers / end users to put in a request in the system to acquire software. The process involves collaboration of the following teams from the request of software, payment, and installation.

- Architecture & Security, Risk & Compliance
- Applications & Web Services
- Legal Services
- Privacy Office
- Supply Chain Management
- Accounts Payable
- Deskside Team

Goals of the process:

- To provide all the stakeholders with a simplified method to collaborate on a software purchase.
- Ensure this software meets all the organization guidelines
 - FOIP Act
 - IT Security Standards
 - Legal Agreements
 - SCM policies and procedures

Software Acquisition Process



Requirements

- System should allow user to submit a request to purchase software at university with the following details:
 - Name of the software
 - Department Name
 - No. of users
 - Software Cost
 - Business Reason
 - Information Type (level 1 - level 4)
 - Requestor phone number or email
 - Comments (Optional)
- System should create tasks to different teams:
 - Zone Manager
 - Architecture and Security, Risk and Compliance
 - Apps and Web Services
 - Privacy Office
 - Legal Services
 - Supply Chain
 - Accounts Payable
 - Deskside Team
- Requestor Tasks
 - Submit the request
 - Work with different teams to provide information required by them
 - Requestor needs to accept Terms of Use (TOU) in Security Training module
 - Requestor needs to complete Privacy and Security Training in the Security Training module
- Zone Manager Tasks
 - Review request and validate request
 - Assist with software or application development requests
 - Assist with completion of the IT Risk Assessment
 - Provide guidance during RFP process
- Architecture and Security, Risk and Compliance tasks
 - Review the request

- Complete a Threat Risk Assessment (TRA) for level 3 and Level 4 requests
 - Tracking the completion of the treatment plan
 - Ensuring University infrastructure is kept secure from vulnerabilities
 - Confirm the data level and data storage zone
- Application and Web Services Tasks
 - Activities required for new applications such as system design, system build or changes to existing applications/systems
 - Confirm the Confirmed SW install location field in their ticket when it is not installed on Requestor desktop / laptop
- Privacy Advisor Tasks
 - Will assist with Level 3 and Level 4 requests that contain personal identifiable data
 - Assisting with confirmation of the data level when required
 - Ensuring the standards and guidelines within the FOIP and HIPPA acts in compliance
 - Completing a privacy impact assessment (PIA) when required
- Legal Office - Lawyer Tasks
 - Review contracts and SOW's
 - Provide guidance to the Requestor on agreement issues, concerns, and liabilities
 - Negotiating vendors and supplier on agreement amendments
- Supply Chain - Procurement Buyer Tasks
 - Reviewing EULA agreements
 - Obtaining Requestor signatures on Export Control documents
 - Obtaining a supply chain management signature on agreements
 - Confirming the software name and vendor in their ticket
 - Dispatching the purchase order
- Accounts Payable Tasks
 - Processing payment for invoices received from the vendor/supplier
- Deskside Team Tasks
 - Schedule the software installation job in the Job scheduler.
 - Assisting Requestor with software or application install
- Notifications
 - Customer request creation notification
 - Customer request approval notification
 - Customer request completion notification

- Customer request cancellation notification
- Notifications for all tasks
 - New tasks assigned to the following teams
 - Zone Manager
 - Architecture and Security, Risk and Compliance
 - Apps and Web Services
 - Privacy Office
 - Legal Services
 - Supply Chain
 - Accounts Payable
 - Deskside Team
 - Request approval notification to Vendor
- Vendor notification
- Update the data store with software installation job schedule details
- Update the data store with the following:
 - Software request details
 - Software purchase details
 - Software installation details
 - TOU and Training details
 - Vendor details
 - Payment status
 - Task status
 - Request status
- Allow the task assignees to mark tasks as complete

- Allow the different actors to approve / cancel the acquisition request

Nice to Have:

- Reminders for all the tasks assigned.

Assumptions:

- Job Scheduler is an existing schedule system
- The login authentication system is out of the scope for the SAR system. A mock login system will be used for demonstration purposes.

Database Structure

Table Name: Software Acquisition Requests	
Field Name	Data type
Request Number (PK)	int
Software Name	Str
No. of users	int
Software Cost	double
Information Type (Level 1 – 4)	Str
Job Scheduled Time	Date / Time
Software Installed by	Str
Job Assigned To	Str
Request Status	Str
Task Status	Str
Payment Status	Str
Requestor Name	Str
Vendor Name	Str

Table Name: Training	
Field Name	Data type
Requestor Name (PK)	Str
TOU Status	Bool
Training Status	Bool