Asset Register Quality Plan

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# Revision History

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| --- | --- | --- | --- |
| Version | Author | Description | Date |
| 1 | JE | First Version | 29/05/2015 |
| 2 | JE | Amended 1st Version | 03/06/2015 |

# Purpose

The purpose of this quality plan is to identify the quality management methods being applied to the design, building, testing, distribution and maintenance of the Asset Register.

# Quality Objectives

The product should be released with minimal defects. A defect is defined as a product behaviour showing evidence of nonconformity against the agreed specification.

In addition, IRS aims to ensure that this quality plan clearly describes the deliverables, verifications (reviews and tests) and release controls of the product.

# Project Scope

Objective: To provide IRS with a web application for tracking company Asset information and later integrating it within the existing IRS Management System so Assets can be further managed as defined in the Initial Development Specification.

Time: The project was initiated November 2014 and through subsequent review meetings it was agreed to have an expected completion date of core components by December 2015.

Risk: The risk to the business objectives are minimal as the time and resources used to create the Asset Register is localised to one or few people. This results in the average weekly focus 20% manpower for the developer, 2% for any follow-up meetings with other staff members, and 10% for populating the Asset Register.

Impact: The major impact the Asset Register will bring will be upon the improved management capability of our fixed Assets through providing tracking and logging functionality.

# Project Reporting

The Project will be managed through a Prototype Project Management Structure, the core reporting component of which includes:

* Initial Development Specification & Signoff Document
* Feature Requests & Specification through Axosoft OnTime WebApp
* Project Review Meetings logged through Minutes, Emails & the Monthly Status Report
* Feature Release Signoff Documents

These documents, and all other documents pertaining to the Asset Register, will be available in – G:\RND\Work Packages\WP0032 - Asset Register\Management Docs\

# Project Development

The project will be developed through an Agile and Rapid Prototyping structure that focuses on core module feature releases so tangible progress is realised in the business environment. The repeating release structure is as follows:

Release {v1}

* Specification
* Design
* Testing
* Verification
* Validation
* Rollout
* Training

# Roles & Responsibilities

The roles and responsibilities for this project are defined below:

**Developer – JE**

The developer will undertake the project development lifecycle while regularly liaising with the project manager.

**Project Manager – JC**

The project manager serves as business contingency to ensure the project remains within the scope of the business objectives.

**Asset Population Personal – SD & JL**

Asset population personal are tasked with sourcing and entering asset data into the Asset Register when the Asset Register has had its web variant released.

# Project Initiation

The project was initiated as a prototype project to see if it could meet the needs of the business objective of improving the tracking and logging of our Assets. The project was initially conceptualised October 2013, however development and signoff of the project did not start until November 2014. The project was initiated via management instructing JE to research possible solutions & then undertake the development/reporting of the project using the methods identified above.

# Lifecycle Management

The Asset Register will follow the life cycle management as described in the Company Lifecycle Model Management Policy.

# Data & Record Management

Data and records that the project contains are:

* Company Assets, including the:
  + Manufacturer
  + Model
  + Description
  + Review of an Asset
  + QR Code Identifier
* Company specific assignments, including:
  + Categorisation of assets
  + Grouping assets as a single entity
  + Location of assets
  + Purchase order code

# Measurement & Analysis

The project will be measured through analysing the time it took and number of features worked on during a set time period and the amount of defects generated. This measurement & analysis is generated through Axosoft Ontime automatically, allowing it to be reviewed when required.

The development will aim towards zero defects being generated, however if defects are found then the estimate completion time will be tracked and updated with the actual time when the defect has been fixed. The same process of estimating development time and adding actual development time will be applied to features.

Any none developmental logging will be handled through incident management.

# Infrastructure & Development Environment

The developer for this Project will need the following

* A Desktop PC or Laptop with access to 2 displays
* Git
* SQLYog
* Netbeans (or other IDE such as Eclipse)
* Xampp 1.8.x
* Web Browsers as required
* Access to OnTime

Testers for this Project will need the following

* A Desktop PC or Laptop with access to 2 displays
* Web Browsers as required
* Access to OnTime

# Incident Management

Incidents within the project will be managed through users raising defects via OnTime. These defects may be made known to the development team through emails or meetings. However it is the responsibility of the project manager to ensure that any defects raised in this manner are properly logged via OnTime. The defects found will be measured, using the measurement & analysis management procedure during project meetings.

# Risk Management

Risks within the Project have been identified within the project scope.

Risks when identified will be made known to the project manager, if a risk is unavoidable or has already occurred then a solution will be worked upon by the development team. The project manager is responsible with dealing with risks associated with the project. From June 2015 they are to track risks associated with the project with the Asset Register Risk Register.

# Change Management

Changes within the project will be managed through users requesting features via OnTime. Each feature when requested will be entered into the project backlog. The project backlog will then be reviewed at subsequent development meetings to identify which features are most suitable to be in the next release candidate. Depending on how far the feature is needed by the business objectives it may be in the next update package or be several updates down the line. The project manager is responsible for prioritising this.

Each new release of features will need to be tested first and then approved by the project manager. Once approved by the project manager the features can be rolled out to the live environment.

# Configuration Management

From June 2015 the configuration management will be handled through the following Git version control process. There will be a central repository from where anyone who requires the code will pull it from.

At all times there should be a Master Development branch. All development work will come from this Master trunk. When coding a feature from OnTime, a new branch should be made from the Master branch named after the user story ID. Any commits for this feature should be on this branch until the feature is completed. This branch should then be merged back into Master. There should always be a Live Branch that contains the stable and live code that user’s access. The Live branch should not be touched unless implementing a hotfix or pushing a release to it.

When features for a release have been completed and the release is ready for validation, a Testing branch should be created from the latest Develop commit. If defects are found during testing, the code in this branch should be altered. This testing branch should be running on an environment that is or emulates the live environment. Any commits from defect fixes during testing should be pushed to back the Develop branch. Once validation has been completed, the Testing branch will be merged with Live branch and tagged with an appropriate version number.

When coding a hotfix from OnTime, a new branch should be made from the Live branch named hotfix-[defect ID]. Any commits for this hotfix should be on this branch until the fix is completed. Once completed, the hotfix should be merged into the Live branch and tagged with an appropriate version number as well as the Develop branch.

# Verification & Validation

The project will be verified & validation in regular review meetings by the project manager to ensure the project status meets the initial specification requirements. The verification & validation is managed through OnTime features being grouped as a release candidate and tested against by the developer and a member of staff. The release candidate will then need to be signed off by the project manager once all testing has been completed against it.

The project developer will verify the scope of the project through undertaking tests to ensure that the features requested in OnTime work during development. This is an active testing process against the acceptance criteria.

The project will be validated through user acceptance tests built on the acceptance criteria. These acceptance tests will be written by the developer and tested by a separate member of the company. Only when all tests have passed and the project release has been seen to meet the company objectives can the rollout procedure be initiated.

# Stakeholder Requirements

The project stakeholders and their requirements are listed below:

**Internal**

JE – Developer, undertakes the development of the project and adds stakeholder requirements as feature backlogs where other stakeholders are not able to do so.

JC – Project Manager, oversees the direction of the Project. His requirements are identified within the acceptance criteria of the features listed in OnTime.

RW – IT Manager, advises the direction of the Project. His requirements are identified within the acceptance criteria of the features listed in OnTime.

Corporate – The Company staff members & upper management make their requirements known through meetings and emails. They are formally written up within the acceptance criteria of the features listed in OnTime when required.

**External**

Customers – Customers will not directly see the project however they may notice the improvements that the project brings to the company. Their requirements are not tracked at this time; however this may change in the future when the project develops further.

# Requirements Analysis

The stakeholder requirements are analysed through comparing how sufficient a particular feature matches up with the acceptance criteria that the stakeholder requested. If the feature matches the acceptance criteria then the feature has been completed to the stakeholder requirements. If it has not, then the feature will need to be reviewed for why it was not completed to specification and the appropriate against taken against it. The action will be listed any developmental meetings that are due for the project.

# Project Closure

The project will be reviewed upon its expected completion date of December 2015 and a project summary report will be generated detailing the progress of the project. If the project has reached a closure standpoint, requires more developmental time or needs to enter an ongoing live maintenance cycle then this will be recommended in the Project Closure Summary Report.

# Quality Management

The project will be managed via the Company Quality Management Policy.

# Integration Management

The project will be integrated into the following existing systems:

* Accounting logs via Sage
* IRS Management System

Sage requirements will be identified by the Sage development team and relied via the Asset Register Project Manager to the Asset Register Development team. These requirements will be worked on via the development team as feature requests using the OnTime system and each step reviewed by the project manager.

The IRS Management System will require collaboration with the Systems Analyst, WY to bring the Asset Register into the IRS Management System. WY is preparing coding instructions on how to emulate Asset Register components into the Management System with his training guide, once completed the AR development team can begin work on integrating the web form into the IRS Management System.

# Release Management

The production environment should be a Windows 2008 R2 Server Running:

* IIS 7
* MySQL 5.5
* PHP 5.4

This is expanded upon in the Asset Register Rollout Instructions.