*Generic Sentiment Analysis tool*

Requirements MANAGEMENT PLAN

Version *<1.0>*

*<10/11/2019*

VERSION HISTORY

Kratrim-Prgnya is a team from Analytics department which was facing some issues during daily basis while performing the some iterative time consuming task. Hence team wanted to automate the steps they carry throughout the development so that it will help them understand the requirement easily and efficiently. Hence team decided to develop a Generic Tool which can perform the tedious task in single click away.

Team proposed an idea to the respective project manager and received an approval for the same. For the completion of project total 5 resources were allocated. Out of 5, 3 were developer, 1 for Designing/ Planning and 1 for Quality Engineering. Project is tracked and monitored with Requirement traceability Matrix.

For details about the project, please refer the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** |
| 1.0 | Chanabasagouda PATIL | 10/11/19 | Suneel Kumar KANTHALA | 10/08/19 | Initial Requirements Management Plan draft |
|  |  |  |  |  |  |
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TABLE OF CONTENTS

[1 Introduction 4](#_Toc22549798)

[1.1 Purpose of The Requirements Management Plan 4](#_Toc22549799)

[2 Requirements Management Overview 4](#_Toc22549800)

[2.1 Organization, Responsibilities, and Interfaces 4](#_Toc22549801)

[2.2 Tools, Environment, and Infrastructure 4](#_Toc22549802)

[3 Requirements Management 5](#_Toc22549803)

[3.1 Assumptions/Constraints 5](#_Toc22549804)

[3.2 Requirements Definition 5](#_Toc22549805)

[3.3 Requirements Traceability 5](#_Toc22549806)

[3.4 Workflows and Activities 5](#_Toc22549807)

[3.5 Change Management 6](#_Toc22549808)

[Requirements Management Plan Approval 7](#_Toc22549809)

[Appendix A: References 8](#_Toc22549810)

[Appendix B: Key Terms 9](#_Toc22549811)

[Appendix C: Requirements Definition Template 10](#_Toc22549812)

[Appendix D: Requirements Traceability Template 11](#_Toc22549813)

# Introduction

## Purpose of The Requirements Management Plan

Requirement Management Plan is required to gather, track, assess and monitor the development of product. It helps us to understand what we are doing in the Generic Analytics Tool. R.M.P will guide both management as well as the developers to keep a track of everything and make sure that the objective of project should be achieved in stipulated time

The Requirements Management plan is used to document the necessary information required to effectively manage project requirements from definition, through traceability, to delivery.

The Requirements Management Plan is created during the Planning Phase of the project. Its intended audience is the project manager, project team, project sponsor and any senior leaders whose support is needed to carry out the plan.

# Requirements Management Overview

## Organization, Responsibilities, and Interfaces

Following table explains the task has been assigned to whom in detail.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Team Name** | **Idea Name** | **Reporting Manager** | **Team Member** | **Role** |
| **KRATRIM-PRAGNYA** | **Generic Analytic Tool** | Sindhuri MANCHIKALAPUDI | Sai Sindhu BUDHARAM | Designing and Planning |
| Suneel Kumar KANTHALA | Madhav SRIMOHAN**(POC)** | Developer |
| Suneel Kumar KANTHALA | Chanabasagouda PATIL**(POC)** | Developer |
| Sindhuri MANCHIKALAPUDI | Venkata Tejaswi KANTHIMAHANTI | Quality Engineering |
| Deepak MEKA | Jayachandra KODALI | Developer |

## Tools, Environment, and Infrastructure

Following tables will illustrate the tools, Environment and Infrastructure utilized for the development of project.

Hardware Specification for the Project:

|  |  |  |
| --- | --- | --- |
| **Project** | **Environment** | **Specification** |
| Generic Analytics Tool | Server Name | MTLP - 357 |
| Operating System | Windows 10 |
| Processor | Intel i5 -7200U CPU @2.50GHz |
| Installed Memory | 8 GB RAM |

Software Specification for the Project:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project** | **Environment** | **Specification** | **Type** | **Price** |
| **Generic Analytics Tool** | Anaconda Navigator | 5.2.0 64 Bit | Open Source | None |
| Python | 3.6 | Open Source | None |
| Python-Flask | 0.11.1 | Open Source | None |
| Machine Learning Libraries |  | Open Source | None |

Control of Versioning of project:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project** | **Environment** | **Specification** | **Type** | **Price** |
| **Generic Analytics Tool** | Git-Hub | CLI | Open source-Public | None |

# Requirements Management

## Assumptions/Constraints

Since the project objective is to develop a flexible generic tool constrain are not there. But while interacting with the tool we assume that the dataset is uploaded will be in the following format only:

1. CSV – Comma Separated Value
2. Excel – Excel Document
3. TSV – Tab Separated Values

## Requirements Definition

The definition of requirement gathered is as followed: “Automate the tedious task in Analytics and build a tool which can perform the tasks”

Team objective to automate the following steps of Analytics:

1. Exploratory Data Analysis
2. Prescriptive Data Analysis.

To achieve the above, team utilized Python as a scripting language.

## Requirements Traceability

Requirement Traceability Matrix has been only maintained to web-scripting tasks. Task related to ML cannot be bound in RTM

## Workflows and Activities

Workflow Followed: Waterfall Model.

Activities conducted while developing the tool are as follows:

1. Requirement Gathering( 2 Days)
2. Analysis (1 Day)
3. Design ( 2 Day)
4. Development (3 Days)
5. Unit Test (1 Day)
6. Deployment. (1 Day)

## Change Management

If any changes has been observed they will be moved to next development life cycle.

## Requirements Management Plan Approval

The undersigned acknowledge they have reviewed the Generic Analytic Tool **Requirements Management Plan** and agree with the approach it presents. Changes to this Requirements Management Plan will be coordinated with and approved by the undersigned or their designated representatives.

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: | Suneel Kumar KANTHALA |  |  |
| Title: | Manager |  |  |
| Role: | Project Manager |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: | Deepak Meka |  |  |
| Title: | Manager |  |  |
| Role: | Manager |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: |  |  |  |

Appendix A: References

The following table summarizes the documents referenced in this document.

|  |  |  |
| --- | --- | --- |
| **Document Name and Version** | **Description** | **Location** |
| Requirement Management Plan | Document to track and monitor the development process |  |

Appendix B: Key Terms

Appendix C: Requirements Definition Template

Appendix D: Requirements Traceability Template