**Configuration Management**

for

trendAssist App

Version 1.1 approved

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**Introduction**

trendAssist is a business finance and trend prediction program that allows the user to input data over sales made in a day. This data will then be submitted into a database containing financial sales data for every day of the week. It will also allow the user to input data from years past to increase the accuracy of sales predictions; the program will then use this information to generate a new estimation of revenue for that same day of the week in the future and describe requirements needed to hit specific profit margins. This will enable an authorized user (owner or manager) to determine the optimal staffing needed on any given day to support the expected crowd and maximize profits. The most recent year’s data will be weighted higher than the previous year’s data to maintain accuracy and adjust for recent trends.

**2.1 Organization**

The software configuration is handled by all members of the project, with specific tools. Responsibilities are shared between all team members.

* The software configuration manager [SCM]
* The project manager [PM]
* The scrum manager [SM]
* 3 developers [D]

These roles change at the end of each scrum.

**2.1 Activities and responsibilities**

**When setting up the project**

* Identify the configuration items [SCM]
* Install the bug repository tool and set up the database [SCM]
* Install the software configuration repository tool and set up the database [SCM]
* Manage and structure the reference space [SCM]
* Define the configuration processes [SCM]

**During the project lifecycle**

* Export components for modification, test or delivery [SCM]
* Set under control validated components [SCM]
* Create version, write version delivery document [SCM]
* Approve reference configurations [PM]
* Verify version to be delivered and authorize deliveries [PM]
* Backup spaces [SCM]
* Do configuration audits [PM]
* Inspect configuration records [PM]
* Archive reference version [SCM]

**Management activities**

* Manage versions and archives [SCM]
* Manage configuration records [SCM]
* Produce reports and statistics [SCM]
* Manage reference space and its access control list [SCM]
* Manage spaces backup and archive media [SCM]
* Manage quality reports [PM]

**2.1.1 Decisions process and responsibilities**

At the end of an activity of the project

* Do a configuration freeze [SCM]
* Present a configuration state of the components impacted by the activity [PM]
* Present a documentation state of the components impacted by the activity [SCM]

Configuration management process audit

* Do the configuration management process audit [PM]
* Present the records of the configuration management process [SCM]
* Present the quality records of the configuration management process [PM]
* Present the records of the documentation management process [SCM]

**3.1 Configuration identification**

**3.1.1 Identify configuration items**

* SRS
* Sprint backlog
* Sprint review
* Team member report
* Main line
* Code line
* Release line
* mySQL
* Java

**3.1.2 Name configuration items**

* SRS.x.x
* Sprint backlog.x.x
* Sprint review.x.x
* Team member report.x.x
* Main line.x.x
* Code line.x.x
* Release line.x.x
* mySQL.x.x
* Java.x.x

**3.1.3 Acquiring configuration items**

* These configuration items are software, configuration changes will be nonphysical.

**3.2 Configuration control**

**3.2.1 Requesting changes**

* Changes can be requested by customer by E-mail
* Changes can be requested by [D] by internal memo

**3.2.2 Evaluating changes**

* Changes requested will be reviewed by [SCM] then sent to [PM]
* Changes requested will be reviewed by [PM] then send to [D]

**3.2.3 Approving or disapproving changes**

* Changes will be checked for feasibility
* Changes will be evaluated for cost
* Changes will be evaluated for priority

**3.2.4 Implementing Changes**

* Changes requests are emitted from by the project manager according to the problem resolution process
* When a change request is accepted by the project manager/product manager, a branch is created by the SCM
* Branch Identification will be trendAssist.[CustomerID].x

**3.3 Configuration status accounting**

**3.3.1 Metrics to be tracked and reported**

* Number of customers using version x.x.x of trendAssist
* GitHub version control and metrics tracking
* SCRUM management
* Document: The modification sheet number identifies the origin of the modification. The modified paragraphs in the document are identified, if possible, by revision marks
* Source file: The software configuration management tool records, for each source file or group of source files, a comment where is described the modification
* Configuration item: The Version Delivery Description of the article identifies the modification sheet included in the current version
* The modification sheet will describe the modifications done to the components with enough precision to identify the modified parts.

**3.3.2 Storage and access control of status data**

* GitHub is used for storage control of the trendAssist software and configuration
* Consumer data will be stored on the customers local device unless otherwise requested to protect customer data.
* The records are stored in a configuration folder, which contains:
  + The requests sorted by record number,
  + The software documents,
  + The configuration states sorted chronologically.

**3.4 Configuration evaluation and review**

**3.4.1 Auditing**

* Audit of CI’s by the PM and the SCM if any configuration changes need to be made
* baseline audit, functional configuration audit, software configuration audit.

**3.4.2 Definitions**

* The objective of reconfiguration is to change the system to be more accommodating to the customer.
* The schedule will be defined by the SCM based on the customer needs.
* The PM will work with the SCM to audit the changes made to the code line before anything is committed to the base line.
* The PM, SCM, SM and D will meet to discuss the changes made before deciding any version becomes a release line.

**3.5 Interface control**

* Changes made to any CI’s to interface with items outside of the scope of this document after the PM approves will have the same audit procedure as any other change or revision.

**3.6 vendor control**

* Product redistribution outside of our team is **STRICTLY** not allowed

**3.7 Release Management and Delivery**

* As D decides to bring a potential change to the PM to commit from the code line to the base line.
* The changes can now be compiled, and the executable created.
* If the PM decides to commit the change to the main line, then the SCM will make the changes to the CI’s
* If the change passes the audit, then it can be committed to the release line and recompiled to an executable.
* Distribution of the product will be handled by the PM sending an email to the customer.

**4.1**