Aki Pro Plus Project

Software Development Plan (Small Project)

Version <1.0>

Timothy Hinds: 812003224

Nika Pinder: 812002915

Dwane Alexis: 812002736

Leshsean Celestine: 812002983

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| <03/Oct/14> | 1.0 | Preliminary Project Plan | Entire Software Project team |
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Software Development Plan (Small Project)

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# Introduction

In this section of the project plan we will identify and give a concise description of the following project attributes which are the purpose, scope, references, finally the project overview.

## Purpose

The purpose of this project is to re-engineer Aki Pro into an interoperable and scalable system. By converting it from a desktop based application into a web based application that will afford external entities the opportunity to conduct business irregardless of their geographical location.

## Scope

The scope of the project focuses on introducing three new web based applications to the current system, to achieve the project purpose as stated above.

* The first is the Customer Accounts application, this web application permits customers to request changes to their standing order as well as to view general information as it pertains to their customer details and account history.
* Secondly is the Delivery application that allows the company’s drivers to automate daily business transactions and to synchronize this information with the system upon their return to the office with the use of mobile devices.
* Thirdly is the Sales Rep application that permits sales merchants to make changes to customer standing orders primarily supermarkets, according to the performance of the product against its competitors. This application also allows its users to generate and view reports as it relates to the sales of the various products.

## 

## Definitions, Acronyms, and Abbreviations

This section will be updated in the proceeding revised version of this project plan.

## References

Zephrins, Andre and Goodridge Wayne Dr. Interviewed by Nika Pinder. U.W.I St Augustine, September 4, 2014.

## Overview

The purpose of this project is to remodel AkiPro into a more interoperable system termed Aki Pro Plus, by converting the entire system from a desktop based application to web based application. The scope of this project focuses on the integration of three new applications into the system, to achieve the purpose outlined above. They are Customer Accounts, Delivery and Sales Rep applications. The Customer Accounts application permits customers to request changes to their standing order via the web, as well as view their account history. The Delivery application allows drivers to automate daily transactions and synchronize this information onto the system using a mobile device. In addition the Sales Rep application allows sales merchants to change standing orders as well as view and generates reports using mobile devices.

Project Organization

The project team comprises of four group members which are

Nika Pinder – Senior Manager

Timothy Hinds-VP Operations

Dwane Alexis- Senior Software Engineer

Leshsean Celestine- Software Engineer & Administrative Assistant.

Management Process

This project is partitioned into three parts project planning, requirements analysis and evaluation of project design. The deliverables that derive from these three sections are the project plan, requirements document and the evaluation report respectively. Each deliverable consist of milestones. The Project Plan consist of the following milestones:

* an introduction
* project overview
* project organization
* management process
* project monitoring and control

The requirement document consist of the following milestones

* User requirements
* System requirements.

The evaluation report

* Testing report

The duration of this project is thirteen weeks and the estimated cost of the project is TT$13,200.00. At least two group members where assigned to each milestone. The team has created a Gantt chart that monitors progress of the project. . The team utilizes a hybrid methodology that consist of the waterfall and extreme programming approach. Tools utilize in this project are Microsoft Project, Visio and Word as well as Git hub.

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# Project Overview

## Project Purpose, Scope, and Objective

The purpose of this project is to remodel AkiPro into a more interoperable system termed Aki Pro Plus, by converting the entire system from a desktop based application to web based application. The scope of this project focuses on the integration of three new applications into the system, to achieve the purpose outlined above. They are Customer Accounts, Delivery and Sales Rep applications. The Customer Accounts application permits customers to request changes to their standing order via the web, as well as view their account history. The Delivery application allows drivers to automate daily transactions and synchronize this information onto the system using a mobile device. In addition the Sales Rep application allows sales merchants to change standing orders as well as view and generates reports using mobile devices.

The deliverables that are produced by this project are as follows:

* Project plan which charts the course of the project functions as a reference document for the managers, stakeholders, developers and other interest groups as to direction the project is intended to go against the work that is actually being done as well as it serves as a reminder of the project purpose and scope.
* The requirements document comprises of the user and system requirements documents.

This document is the official legally binding document between the client and the software team. It provides a comprehensive view of how the software should make provision for.

* The evaluation report documents the test performed on the prototypes developed.

## Project Deliverables

Preliminary Project Plan October 3, 2014

Requirements Document November 3, 2014

Evaluation Report November 28, 2014

Project Assumptions and Constraints

Constraints: Time, Budget and Financial Resources, Competence of team members, Limited documentation of the current system.

Assumptions:

* Availability of software tools to complete the project
* That all of the team members understood the big picture behind the project
* That there is sufficient financial resource to complete the task
* Assumption that the project scope would remain the same.

## 

## Evolution of the Software Development Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Date | Updated By | Description | Criteria Revision |
| 0.1 | 2014.10.03 | Entire Team | First Draft | One or more sections of project plan needs to be updated . |
| 0.2 | 2014.10 23 | Entire Team | Second Draft | One or more sections of version 2 of the project plan needs to be updated. |
| Unscheduled Version | 2014. 10.30 | Entire Team | Third Draft | One or more sections of the project plan has to be reassessed. |

# Project Organization

## Organizational Structure

The project team comprises of four group members which are

Nika Pinder – Senior Manager

Timothy Hinds-VP Operations

Dwane Alexis- Senior Software Engineer

Leshsean Celestine- Software Engineer

## External Interfaces

* Customers are expected to interface with project to ensure that the user requirements are met.
* Taxation Authorities to that the software project being implemented upholds taxation legislature.
* Financial Institutions to ensure that the financial reports presented by the software is in keeping with their regulations.

## Roles and Responsibilities

|  |  |
| --- | --- |
| **Person** | **Rational Unified Process Role** |
| Nika Pinder, Senior Manager | [Project Manager](file:///C:\process\workers\wk_projm.htm) [Requirements Reviewer](file:///C:\process\workers\wk_reqrv.htm)  Design Reviewer |
| Timothy Hinds, VP Operations | [Project Reviewer](file:///C:\process\workers\wk_prrev.htm) [Requirements Reviewer](file:///C:\process\workers\wk_reqrv.htm)  Test Manager  System Analyst |
| Dwane Alexis , Senior Software Engineer | [System Analyst](file:///C:\process\workers\wk_sysan.htm) [User Interface Designer](file:///C:\process\workers\wk_uides.htm)  [Test Analyst](file:///C:\process\workers\wk_tstanl.htm)  and to a lesser extent the following roles:  [Designer](file:///C:\process\workers\wk_dsgnr.htm) Test Designer [Technical Writer](file:///C:\process\workers\wk_tchwr.htm) |
| Leshsean Celestine, Software Engineer | [Designer](file:///C:\process\workers\wk_dsgnr.htm) [Test Designer](file:///C:\process\workers\wk_tstds.htm) [Tester](file:///C:\process\workers\wk_tstr.htm) [Technical Writer](file:///C:\process\workers\wk_tchwr.htm) |

# Management Process

4.1 **Project Estimates**

Cost benefit analysis was calculated by charging clients TT$30.00 per hour on each milestone produced.

|  |  |  |  |
| --- | --- | --- | --- |
| Deliverables | Due Date | Milestones | Resources |
| Project Plan | 03/10/14 | Introduction, Project Overview, Management Process  Project Monitoring Control | Entire team was assigned to this task  Duration 4 weeks  Estimated cost :$4800.00 |
| Requirements Document | 03/ 11/14 | User Requirements  System Requirements | Entire team assigned  Duration : 4 weeks  Estimated Cost: TT$4800.00 |
| Evaluation Report | 24/11/14 | Testing plan | Entire team assigned  Duration: 3 weeks  Estimated Cost: TT$3600.00 |

## Project Monitoring and Control

* Requirements Management: updated in the next version of the project plan.
* Schedule and Budget Control: The resources allocated to the project will be monitored using the Gantt chart as each phase of the project is completed.
* Quality Control: The XP methodology utilized by the team allows for frequent communication between the clients and the team to ensure that the quality of the project deliverables matched the client’s expectations. In addition the tool Git hub was used to synchronize the work done by team members which made it easier to test for consistency and completeness in each task.
* Project Close-out: To be updated in the revised version of this document
* Problem Resolution: To avoid ambiguity in the requirements analysis the team would host regular meeting with the client to ensure that the customer requirement are well understood by the entire team. When this is finalized the client would meet once more with the team to verify that these are indeed the requirements and scope of the project. In addition to this acceptance testing should carried out when a prototype is released.
* Process Improvement Plan: The progress of the project would be assessed against the Gantt chart.

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| --- | --- | --- |
| **Risk Ranking (High, Medium, Low)** | **Risk Description and Impact** | **Mitigation Strategy and/or Contingency Plan** |
| Medium | The risk of having schedule flaws: Due to the volatile nature of software development, it is inherently very difficult to estimate and properly schedule all the necessary stages of development and actually stick to the schedule. This can lead to some stages of the project having insufficient allotted time and resources while other stages may have more than needed | The entire team needs to be involved in the planning and estimation phase. There must be early discussion and feedback among all the members of the team. |
| Medium | The risk of inflating requirements: During the course of development, more and more features that were not initially required may arise and throw off already established estimates and schedules. | The planning team must be sure to constantly involve the users/customers in the development process to ensure that as time progresses, the initial requirements are being consistently met. |
| High | The risk of incorrect specification breakdown: When the time comes for the coding to begin, if the specifications are not accurate and complete then the programmers may either create software that doesn’t meet requirements or it may halt the development process, delaying the end product. | There must be personnel on the team dedicated to liaising between programmers and those elicit requirements. These people need to have adequate knowledge of both side and need to be readily available for questioning if problems arise |
| High | The risk of employee changes: When an employee leaves, it compromises the ability of the others to do their job because they have to pick up the slack while simultaneously doing their part. If key personnel leave, the impact is far greater because critical information that only they are familiar with can be lost. | There needs to be high levels of collaboration and accountability. There must be no segregation or seclusion. This ensures that everyone’s responsibilities are always accounted for. |
| Medium | Lack of Productivity: In the case of lengthy project timelines, the sense of urgency and enthusiasm is greatest at the beginning stages but may be diluted as time progresses or when complications arise resulting in time lost in subsequent stages. | There must be short iterations of assessment relative to each stage in development to ensure that a sense of urgency is always upheld. Tasks must be assigned to the right people and there must also be an ongoing process of coaching and team development. |

**Risk Management**

