Process Plan– Team 007

Version: 1
Revision: 1

1. Introduction

We will be producing an Android mobile application for the LameDucks reward management system. The application will allow LameDucks employees to manage the rewards, and purchase history, of their VIP customers in various locations. The application will also allow the managers of LameDucks coffee carts to generate daily reports of purchase and pre-order information.

2. Process Description

The reward management system will be implemented using the Rational Unified Process(RUP) which will consist of multiple phases and iterations throughout the application's design. There will be a set of documents and artifacts that are produced as part of this process. The description and purpose of these documents and artifacts will be listed throughout this section the corresponding phase will be noted within parenthesis.

3. Team

Our team consists of 4 members. Each member will contribute to the various artifacts and documentation. It is expected that every member participate in peer review stages and complete code reviews as needed on GitHub.

Bryan Smith

Bryan will be the lead for the following deliverables and artifacts:

- Use case documents and diagrams
- Supplementary and non-functional requirements
- Develop System architecture
- Submit project to T-Square

Sterling Taylor
Sterling will be the lead for the following deliverables and artifacts:
- Risk assessment
- User Manual
- Process plan
- Graphs

Sandip Agrawal
Sandip will be the lead for the following deliverables and artifacts:
- Vision document
- Develop system design

Vijay Lakshmipathi
Vijay will be the lead for the following deliverables and artifacts:
- Project plan
- Test planning
- Develop database schema
- Requirements Traceability Matrix

4. Monitoring and Control Process
Changes will be monitored via weekly team meetings and will be implemented once the team agrees. As changes occur within the process the team will submit a new revision of the various documents, this will provide an organized way to track progression and changes within the process. The bulk of our diagrams and documentation will be written using Google Docs. The team will take advantage of the comment system to highlight any areas that need attention. To monitor and control the process of development we will utilize the pull request functionality within GitHub. This will allow the team to perform code reviews before anything gets merged with the master branch.

5.Deliverables and Estimates

Inception Phase Deliverables (Week 1)

Vision Document

The vision document will outline the projects needs, requirements, production, solution, features, scope, accessibility and limitation of the LameDucks Reward Management System.

UML Diagrams - Initial Use Cases

The use case document and diagrams outline the behavior of the application. The documents and diagrams will give a specific representation to how various subjects interact with the system and what the expected outcome is. The use cases should depict the functional requirements of the system and will give the team a detailed overview of what needs to be created from a development perspective.

Risk assessment document

The risk assessment document describes the various business and technical risks involved throughout the development process for the Rewards Management System. Each risk will document the threat level, description, likelihood, impact and mitigation strategy for the risk. The risks will be ordered by descending threat level.

Elaboration Phase Deliverables (Week 2)

UML Diagram - System Architecture

The system architecture document and diagrams outline the underlying data structure of the application. These documents and diagrams give the specific information, structure, functions, and relationships between all objects, systems, functions, and interfaces of the coffee cart management system.

UML Diagram- System Design Implementation

The system implementation document and diagram outline how the application will be deployed and run among the various systems for the coffee cart management system. In particular it will illustrate and outline what features will run on the phone application and what features will be run on the database server.

Non-functional and supplementary requirements
This document will be produced in Phase 2 of 4 of the RUP and will document the various non-functional requirements that the system entails.

User manual
The user manual will provide a concise description of how the system is meant to be used. The manual will outline the various features that the system provides and offer some general troubleshooting information for the system. The primary goal for the user manual is to supplement the training for the user and give them a resource to reference when using the system.

Test planning
Test planning will create tests for the main business flows that the system must satisfy. These tests will be based off the use case diagrams and will be broken into various sub systems to make the organization of each test suite more readable. The test cases will be reviewed by the entire team and will be developed in a later phase.

Develop Prototype
The prototype will be an initial representation of how the system should function. With the prototype an initial database schema will be created. The prototype will provide the team with early feedback on how the system operates and will allow us to change the direction if needed.

Revise Risk Assessment
The assessment will be revised based off information that was discovered or modified throughout the various artifacts within phase 2.

Revise Project Plan
Similar to the risk assessment, the project plan will also be modified based off the information discovered or modified throughout phase 2.

Construction Phase Deliverables (Week 3)

Complete Use Case Model
The initial Use Case model and document will be be completed by phase 3.

Develop database schema
The database schema created with the phase 2 prototype will developed and documented.

Develop and Unit test use cases

This artifact is based off the test planning that happened in phase 2. This is the process where the test cases will be implemented throughout the system. Each team member will have a specific system to test. Some of the larger systems may be organized to smaller sub systems to balance out the work. Unit Tests will be performed for the functional aspects of the system. Testing of the application interface features will be performed manually

Peer review of Alpha release

This should be a review of the initial version of the system. The system should be working for the most part at this point and will be reviewed to make sure the functional requirements are as expected.

System testing and results documentation

The system will be tested and the results will be documented. This document will follow the format:

Action	Expected Behavior	Actual Result	Notes
Add User	User is Added	User is Added	User was added without problem

Requirements Traceability Matrix

The traceability matrix will show the flow of data throughout specific use cases.

Fix system test issues

This artifact is based off the delta of expected behavior and actual results discovered in the system testing and results artifact.

Peer view of Beta Release

Similar to the Alpha review, the Beta review will be a peer assessment of the fixes that occurred due to the testing efforts. This will likely be a multi-iterative step that will happen until the systems expected and actual behavior is the same.

Transition Phase Deliverables (Week 4)

Review all deliverables

The team will meet to go over all the deliverables throughout the project and make any final changes. The majority of time in this phase will be review, any major changes will not be made as they should be discovered and resolved within phase 3.

Submit project to T-Square

A final commit id will be submitted to T-Square.

6. Project Timeline

Detailed project timeline and tasks for team 007 are detailed below.

Team 007 - Coffee Cart Project Plan

ID	Task Name	Duration	Start	Finish	Predecesso	Resource Names
1	**Team 007 Coffee Cart Application**	**22 days**	**Mon 6/23**	**Sun 7/20/14**		
2	**Start Project**	**22 days**	**Mon 6/23**	**Sun 7/20/14**		
3	**Phase 1 - Inception**	**6 days**	**Mon 6/23**	**Sun 6/29/14**		
4	Prepare Vision Document	2 days	Mon 6/23	Tue 6/24/14		Sandip A
5	Prepare Project Plan	2 days	Mon 6/23	Tue 6/24/14		Vijay L
6	**Requirements.**	**4 days**	**Mon 6/23**	**Thu 6/26/14**		**Bryan S**
7	Document Use Cases	2 days				Bryan S
8	Develop Initial Use Case diagram	2 days				Bryan S
9	Prepare Risk assessment document	2 days	Mon 6/23	Tue 6/24/14		Sterling T
10	Inception Review Stage Gate	1 day	Sun 6/29/14	Sun 6/29/14	4,5,6,9	Bryan S,Sandip A,Sterling T,Vijay L
11	**Phase 2 - Elaboration**	**6 days**	**Mon 6/30**	**Sun 7/6/14**	**3**	
12	Document Supplementary/Non-functional Requirements	1 day	Mon 6/30/14	Mon 6/30/14		Bryan S
13	Complete Use Case Document	2 days	Tue 7/1/1	Wed 7/2/14	12	Bryan S
14	Prepare Initial User Manual	3 days				Sterling T
15	**Develop System Architecture**	**2 days**	**Thu 7/3/1**	**Fri 7/4/14**		**Bryan S**
16	Document architectural goals and constraints	1 day				Bryan S
17	Present architecture approach to team	1 day				Bryan S
18	Update System Architecture Document (SAD)	1 day				Bryan S
19	**Develop System Design**	**4 days**	**Mon 6/30/14**	**Thu 7/3/14**		**Sandip A**
20	Develop Data Model	2 days				Sandip A

ID	Task Name	Duration	Start	Finish	Predecesso	Resource Names
21	Develop System Design Document (SDD)	1 day				Sandip A
22	**Test Planning**	**4 days**	**Mon 6/30/14**	**Thu 7/3/14**		**Vijay L**
23	Develop Test Cases	3 days				Vijay L
24	Review and Approve Test Cases (Peer)	1 day				Vijay L,Bryan S,Sandip A,Sterling T
25	Develop Executable Prototype	4 days				Bryan S,Sandip A,Sterling T,Vijay L
26	Revise Risk assessment	1 day				Sandip A
27	Revise Project Plan	1 day				Vijay L
28	**Phase 3: Construction (System Development)**	**6 days**	**Mon 7/7/14**	**Sun 7/13/14**	**11**	
29	Complete Use Case Model	1 day				Bryan S
30	Develop database schema	1 day	Mon 7/7/1	Mon 7/7/14		Vijay L
31	Develop and Unit Test Use Case "Customer Management System"	2 days	Mon 7/7/14	Tue 7/8/14		Vijay L
32	Develop and Unit Test Use Case "Reporting System"	2 days	Mon 7/7/14	Tue 7/8/14		Sterling T
33	Develop and Unit Test Use Case "Purchase System"	1 day	Mon 7/7/14	Mon 7/7/14		Sandip A
34	Develop and Unit Test Use Case "Coffee Cart Selection System"	1 day	Mon 7/7/14	Mon 7/7/14		Bryan S

ID	Task Name	Duration	Start	Finish	Predecesso	Resource Names
35	Peer Review of Alpha release	1 day	Wed 7/9/14	Wed 7/9/14	31,32,33,3	Bryan S,Sandip A,Sterling T,Vijay L
36	Perform System Testing. Document Results	2 days	Thu 7/10/14	Fri 7/11/14	35	Bryan S,Sandip A,Sterling T,Vijay L
37	Create Requirements Traceability Matrix (RTM)	1 day	Fri 7/11/14	Sat 7/12/14	35	Vijay L
38	Fix System Test Issues	2 days	Sat 7/12/14	Sun 7/13/14	36	Bryan S,Sandip A,Sterling T,Vijay L
39	Peer Review of Beta Release (construction Phase Stage Gate)	1 day	Sun 7/13/14	Sun 7/13/14	38	Bryan S,Sandip A,Sterling
40	Complete User Manual	1 day	Thu 7/10/14	Thu 7/10/14	35	Sterling T
41	**Phase 4 - Transition**	**6 days**	**Mon 7/14/14**	**Sun 7/20/14**	**30**	
42	Review All Project Submission deliverables	5 days	Mon 7/14/14	Fri 7/18/14		Bryan S,Sandip A,Sterling T,Vijay L
43	Submit to t-square	0.25 days	Sun 7/20/14	Sun 7/20/14	42	Bryan S