Project 2 Plan – Team 17

1 Introduction

The goal of this project is to create an android application to manage a rewards system for the VIP customers of a coffee shop. This application will enable special VIP customers to accrue points for each purchase. The reward points will be used to enable the VIP customers to receive product discounts and other rewards. Additionally, VIP customers will have the ability to pre-order new dessert offerings. The application will allow the coffee shop manager to generate reports for pre-orders and VIP customer purchases. We will be following the Unified Software Process to plan and implement this project.

2 Process Description

- **Inception:** In this phase, the project team will create a vision for the end product, decide on project scope, and make a business case for the product.
    - **Entrance Criteria:** This phase starts when the project team is assigned the project. The project team will require a description of the required project
    - **Exit Criteria:** The phase ends when all stakeholders have agreed on a project vision, scope, use-case model, project plan, and risk assessment. This step may also produce an early prototype of the application.
- **Elaboration:** In this step, the project design details and architecture start to form. The elaboration activities should target the prominent risk areas highlighted in the risk assessment document produced in the inception phase.
    - **Entrance Criteria:** The elaboration phase requires the initial document produced in the inception phase - especially the risk assessment and use-case model.
    - **Exit Criteria:** The elaboration phase will be considered complete when all stakeholders agree on a newly revised use-case model, a software architecture document, software design, risk assessment, test cases, and a revised project plan. At the end of this phase, there should an executable prototype of the software. This prototype can demonstrate a limited set of functionality, but it's functionality should be targeted to mitigate risks that were highlighted in the risk assessment.
- **Construction:** The primary focus of the construction phase is to build the application.
    - **Entrance Criteria:** The work completed in the construction phase will be based on the documents that were created and revised in the elaboration phase - most importantly, the design, architecture, and use-case models. If the prototype created during the elaboration phase closely matches the agreed upon design and architecture, than it can be used as a starting point for the application development.
    - **Exit Criteria:** The main product of the construction phase will be an executable alpha/beta build of the software application. There should also be a completed use-case model with traceability information included.

- **Transition:** The goal of the transition phase is to roll the software out to its end users.
  - **Entrance Criteria:** The transition phase requires a completed alpha/beta build of the software application.
  - **Exit Criteria:** This phase should produce a high-quality, fully validated and refined final version of the software application.

3 Team

- **Team Members:**
  - Sunitha Dasari
  - Christopher Shultz
  - Elena Zlatopolsky
  - Josh Killingsworth
- **Roles:**
  - **Project Manager:** The project manager will facilitate meetings and project planning. They will be responsible for making sure project components are delegated to team members and are being completed on schedule. The project manager will confirm that all required files are completed, checked into GIT repository, and submitted to T-Square before assignment deadline.
  - **Development Lead:** The development lead will take on the primary responsibility for software development. The activities of the development lead will include both software development and delegation of development activities to the appropriate team members. To comply with waterfall process, they should ensure that all requirements have been completed before software development begins. The development lead will also ensure that all software files have been checked into the final repository revision.
  - **QA Manager:** The QA manager is responsible for software quality. Their primary job will involve developing test cases and delegating test case development whenever necessary. The QA manager will make sure all test cases pass successfully and they are finished by the assignment deadline and included in final repository.
  - **Documentation Lead**: The documentation lead will be responsible for writing quality documentation and delegating documentation duties whenever necessary. They will also ensure that all documentation has been assembled and included in final repository revision.
  - **Developer**: All developers will be responsible for some portion of the software development. They will write software in accordance with the requirements document and fix errors that are found in the testing phase of the project.

- **Role Assignment Matrix:**

	Project Manager	Development Lead	QA Manager	Documentation Lead	Developer
Sunitha Dasari			X		X
Christopher Shultz				X	X
Elena Zlatopolsky		X			X
Josh Killingsworth	X				X

4   Time Estimates and Project Schedule

- **Total Estimates:**
    - Total Effort Hours: Estimated 170 hours between all project resources
- **Task List:**

Task Name	Duration	Predecessors	Resource Names
Inception	5.75 days		
Vision Document	4 hrs		Josh
Initial use-case Model	4 hrs		Sunitha
Initial risk assesment	8 hrs		Chris
Intial Project plan	4 hrs		Chris
Optional prototype	4 hrs		Elena
Elaboration	6 days		
Almost complete use-case model	2 hrs	3	Sunitha
Supplementary requirements	4 hrs		Josh
Software architecture	8 hrs		Elena
Initial design model	2 hrs		Sunitha
Test cases	4 hrs		Sunitha
Executable proto type	8 hrs	6	Elena,Josh
Revised risk assesment	2 hrs	4	Chris
Revised project plan	2 hrs	5	Chris
Preliminary user manual	3 hrs		Elena
Construction	6 days		
Complete use case model	4 hrs		Elena
Traceability information for a couple of use cases	2 hrs		Josh

Alpha/beta software	4 days	13	Chris,Elena,Josh,Sunitha
User Interface	6 hrs		Elena
Shopping Cart	6 hrs	21	Josh
VIP Customer Database	6 hrs	21	Sunitha
VIP Customer Manager	6 hrs	21,23	Elena
VIP Customer Lookup	6 hrs	21,23,24	Elena
Item Manager	6 hrs	21	Sunitha
Transaction Database	6 hrs		Chris
Report Generator	6 hrs	21,26	Chris
(Possibly partial) system test results	4 hrs		Josh
User manual	4 hrs		Elena
Transition	6 days		
Final Development	16 hrs		Chris,Elena,Josh,Sunitha
Submit Project	1 hr	32,34	Chris
System testing	6 hrs		Sunitha
Traceability information on all test cases	4 hrs	19	Josh

- **Gantt Chart:**

ID	Task Name	Jun 22, '14	Jun 29, '14	Jul 6, '14	Jul 13, '14	Jul 20, '14	Jul
1	Inception						
2	Vision Document	Josh					
3	Initial use-case Model	Sunitha					
4	Initial risk assesment	Chris					
5	Intial Project plan	Chris					
6	Optional prototype	Elena					
7	Elaboration						
8	Almost complete use-case model		Sunitha				
9	Supplementary requirements			Josh			
10	Software architecture			Elena			
11	Initial design model			Sunitha			
12	Test cases			Sunitha			
13	Executable prototype			Elena,Josh			
14	Revised risk assesment		Chris				
15	Revised project plan			Chris			
16	Preliminary user manual			Elena			
17	Construction						
18	Complete use case model			Elena			
19	Traceability information for a couple of use cases			Josh			
20	Alpha/beta software						
21	User Interface			Elena			
22	Shopping Cart			Josh			
23	VIP Customer Database			Sunitha			
24	VIP Customer Manager			Elena			
25	VIP Customer Lookup			Elena			
26	Item Manager			Sunitha			
27	Transaction Database			Chris			
28	Report Generator			Chris			
29	(Possibly partial) system test results			Josh			
30	User manual			Elena			
31	Transition						
32	Final Development					Chris,Elena,Josh,Sun	
33	Submit Project					Chris	
34	System testing					Sunitha	
35	Traceability information on all test cases					Josh	