Cafe Order/Management SW DEVELOPMENT PLAN

MIT TEAM (Seo Seongho / Park Chanyoung / Choi Gwanggyu / Son Dongho / Lee Jaesung)
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HISTORY

DATE	CHANGES & ADDS	MODIFIER
2015-03-23	Document structure	Seo Seongho
2015-03-27	Project overview	Lee Jaesung
2015-03-27	Statements of works	Park Chanyoung
2015-03-27	Project model	Son Dongho
2015-03-30	Project management plan	Choi Gwanggyu
2015-03-31	Gantt chart	Son Dongho
2015-03-31	Project check plan	Choi Gwanggyu
2015-03-31	Risk management plan	Seo Seongho
2015-03-31	Review document	ALL

AUTHORING

PART	AUTHOR
PROJECT OVERVIEW	Lee Jaesung
STATEMENTS OF WORKS	70% Park Chanyoung 30% Seo Seongho
PROJECT MODELS	Son Dongho
HIERARCHY OF DEVELOPMENTS	Choi Gwanggyu
ROLES OF EACH DEVELOPMENT	Choi Gwanggyu
WORK BREAKDOWN STRUCTURE	70% Son Dongho 30% Park Chanyoung
EXPECTED PRODUCT OF WORKS	Lee Jaesung
PRODUCT CHECK PLAN	Choi Gwanggyu
RISK MANAGEMENT PLAN	Seo Seongho

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1. PROJECT OVERVIEW

1.1 PROJECT NAME

Cafe/Order User Android Application & Management Program

1.2 PROJECT DETAIL

- Each table in the cafe puts the tablet PC.
- The menu can be ordered using a simple login service.
- Receiving payment coupons, and users can use the coupon.
- Manager's PC may represent a list of received orders.
- Specifies the color of the table. Find out the status of orders at a time.
- Buildup cafe management system.

1.3 PROJECT DEADLINE

Project period : 18th Mar, 2015 ~ 12th Jun, 2015

1.4 PROJECT OBJECTIVES

- Convenient GUI for customers.
- Buildup order system using DB, PHP.
- Buildup communication with the server and order GUI.
- Buildup log-in system.
- Design DB for using coupons.
- Communication between server and customer's tablet PC is enabled.
- Save member's information or order record.
- The change of color makes it easy to understand.
- Buildup non-member ordering system.

1.5 EXPECTED PROFIT

- Staffs are easy to understand and the work process can be fast.
- There is no need to wait in a line at the front of counter.
- Customer can meet service by easy application. So more guests will come back.

2. PROJECT WORK PLANS

2.1 STATEMENT OF WORKS

WBS 1 Design Requirements	WBS 1.1 Home	WBS 1.1.1 Design application depth and define what functions are required for each activity.
		WBS 1.1.2 Make background Image & Button Design.
		WBS 1.1.3 Apply media player for advertising
		WBS 1.1.4 Implement blank activities and link it each button according to application depth.
		WBS 1.1.5 Design home layout
	WBS 1.2 Sign In	WBS 1.2.1 Design sign in layout
	WBS 1.3 Menu&Order	WBS 1.3.1 Implement Android custom list view
		WBS 1.3.2 Design menu&order layout
	WBS 1.4 Coupon Check	WBS 1.4.1 Design coupon check layout
	WBS 1.5 Pop-up notification	WBS 1.5.1 Design pop-up window
		WBS 1.5.2 Implements pop-up window's alarm music
	WBS 2.1 Database	WBS 2.1.1 Design database schema
		WBS 2.1.2 Implement database
		WBS 2.1.3 Define what database functions are required for each activity.
		WBS 2.1.4 Implements common functions
		WBS 2.1.5 Implements functions for sign in activity

WBS 2 Functional Requirements		WBS 2.1.6 Implements functions for coupon activity
		WBS 2.1.7 Implements functions for menu&order activity
	WBS 2.2 Network	WBS 2.2.1 Buildup server
		WBS 2.2.2 Design network security protocols
		WBS 2.2.3 Optimize server
		WBS 2.2.4 Implements network code
WBS 2 Functional Requirements	WBS 2.3 Make order at table	WBS 2.3.1 Implement a function for get the menu data from the server
		WBS 2.3.2 Implement a function for insert menu data into a database
		WBS 2.3.3 Implement show menu list function • Data from the database • Use Android custom list view (WBS 1.3.1)
		WBS 2.3.4 Implement a wish list • Add function from menu list to wish list • Cancel function in wish list • Calculate function for the total cost
		WBS 2.3.5 Implement order function • Send information about order list & customer ID & password • Receive a information about order is accepted or rejected
		WBS 2.4.1 Receive information when the client get the menu data from the server (WBS 2.3.1)
		WBS 2.4.2 Insert information into a database when the client store all data (WBS 2.3.2)

	WBS 2.4 Give an information about all items and today coffee	WBS 2.4.3 Implements Android LongClickListener in custom list view's each item. Get an information from DB and show to customer
		WBS 2.4.4 Implement a function for get the information of today coffee and update database by using UPDATE query
	WBS 2.5 Customer can use coupon and managed automatically	WBS 2.5.1 Implement coupon function • Customer enter ID into text field • Send customer ID to server automatically • Coupon information is received from server • Show coupon list to customer
		WBS 2.5.2 Customer can do another job until coupon list showed • Have to use Android AsyncTask
		WBS 2.5.3 Customer can use coupon • Cost calculate function have to recalled when customer use coupons • Have to send to server which coupon is used
	WBS 3.1 Data structure	WBS 3.1.1 Select data structure for • Menu list • Coupon list • Order list
	WBS 3.2 Algorithms	WBS 3.2.1 Design algorithms & mechanisms for • Handling received notification from desk
	WBS 3.3 Security	WBS 3.3.1 Determine security degree
		WBS 3.3.2 Apply network security protocols (if need)
		WBS 3.3.3 Implements any kind of security algorithms which we have to
	WBS 3.4 First prototype test	WBS 3.4.1 Check UI design with customer
	WBS 3.5 Second prototype test	WBS 3.5.1 Check all functional requirements are satisfied with customer

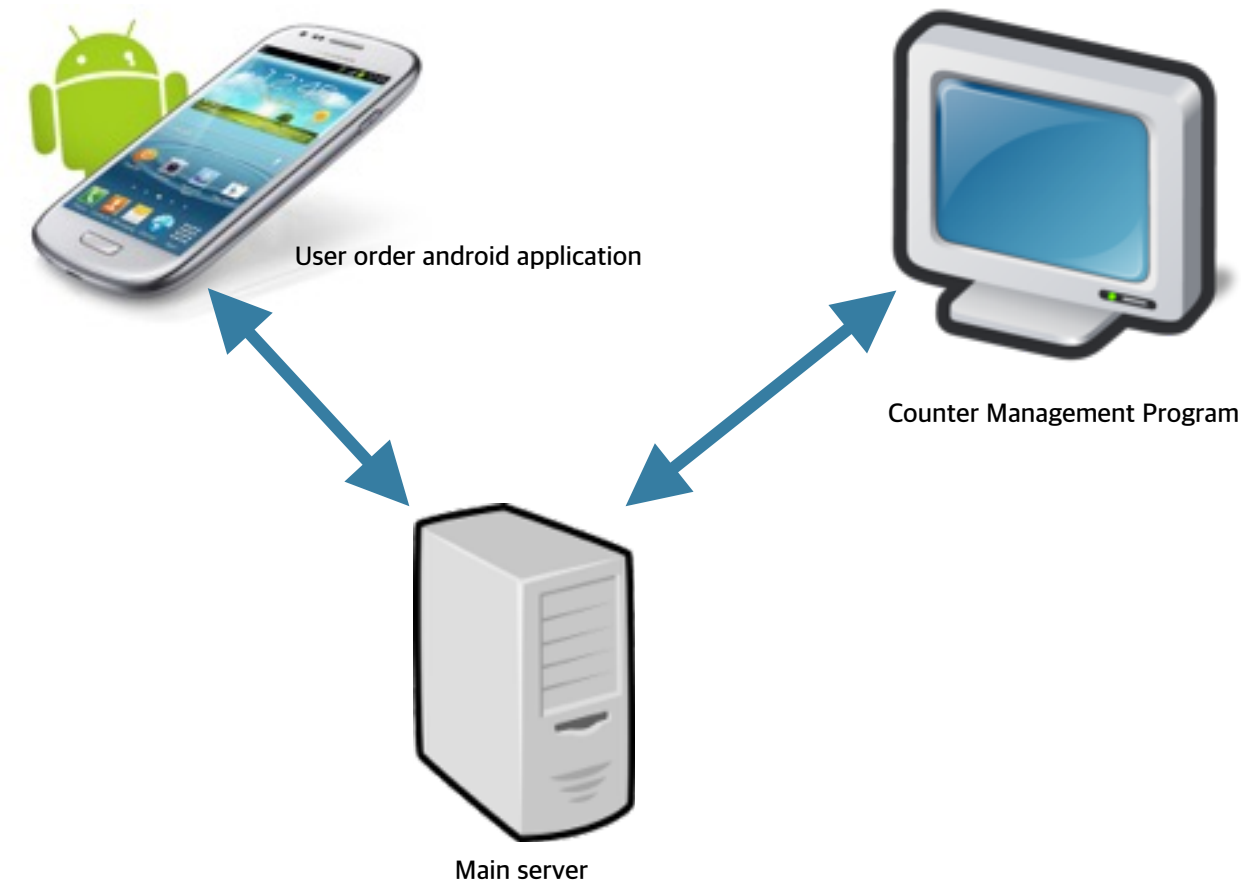
WBS 3 Non-Functional Requirements		WBS 3.5.2 Check algorithms with customer
	WBS 3.6 Beta test	WBS 3.6.1 Test error handling
		WBS 3.6.2 Test application with bunch of data
		WBS 3.6.3 Test application in very slow network environment
		WBS 3.6.4 Improve the weak point of test results
		WBS 3.6.5 Do beta test
		WBS 3.6.6 Improve the weak point of test results
	WBS 3.7 Delivery	WBS 3.7.1 Make an instruction manual
		WBS 3.7.2 Make a meeting with buyer

3. PROGRAM MODELS

3.1 PROGRAM ENVIRONMENT

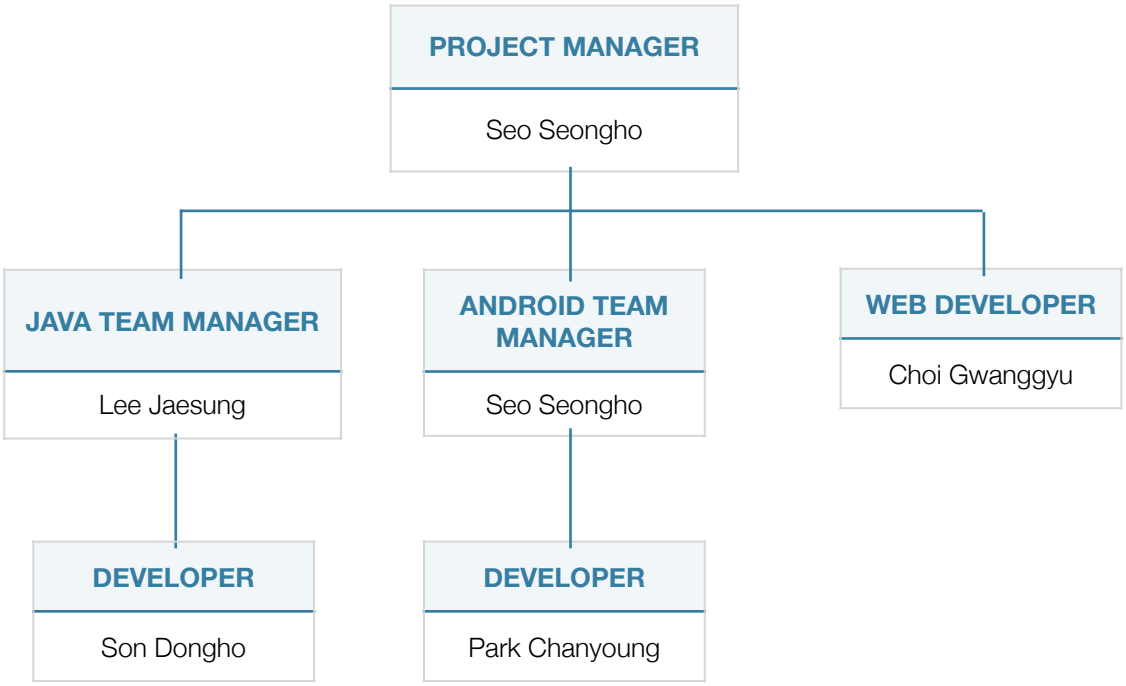
Program	Development Environment	Program Language	Tool
Customer Order App	Mac OS X	Android SDK , Java	Android Studio
Management Program	Mac OS X	Java	Eclipse IDE Luna
Server	Mac OS X	php	Sublime Text2

3.2 PROGRAM STRUCTURES



4. PROCESS MANAGEMENT PLAN

4.1 HIERARCHY OF DEVELOPMENTS



4.2 ROLES OF EACH DEVELOPMENT

Division	Roles and Responsibilities
Team manager	- Development support - Review output - Managing development - Adjusting system construction direction - Development team management and planning

Division	Roles and Responsibilities
Project manager	- Project management - Final decision to key issue - Review to each team's output - Decide major policy related with system construction - Supervise the project process - Regular meeting with customers

Division	Roles and Responsibilities
Developer	- System design and construct - Program implement - Unit module test

4.3 WORK BREAKDOWN STRUCTURE

See Appendix.

4.4 EXPECTED PRODUCT OF WORKS

Step	Expected product of works	Submitted	note
Communication	Requirements Document	30th Mar, 2015	
Planning	WBS	31th Mar, 2015	
	Gantt Chart	31th Mar, 2015	
Modeling	GUI Definition	1th Apr, 2015	
	Database Schema	1th Apr, 2015	
	Protocol Definition	6th Apr, 2015	
Construction	GUI Android Application	13th Apr, 2015	
	First Prototype	17th Apr, 2015	
	Second Prototype	20th May, 2015	
	Beta Version	9th Jun, 2015	
Deployment	Instruction Manual	16th Jun, 2015	
	Final Program	17th Jun, 2015	

5. PROJECT MANAGEMENT

5.1 PRODUCT CHECK PLAN

Division	Contents
PM	- PM will notify the results within a week after the acquisition of each outputs and documents. - If the passage of the outputs is impossible to notice after displaying the contents of what is required to refine and problem areas. - Should review until the next meeting, if the PM is receiving the revised requirements. - When PM receives incomplete output, PM determines whether to approve according to completeness.

5.2 RISK MANAGEMENT PLAN

Risk issue	Target	Solution	Expected delay
Team encounters technical problem : hard to implement, hard to find solution	ALL	Consulting with PM or expert and seminar as team unit.	+3 day / Problem
Delay for midterm study	Choi Gwanggyu	Give time to study before midterm. Be slow before midterm and be faster after midterm.	+4 day / Problem
Someone become lazy	Seo Seongho	PM encourage teammate. Give time to encourage.	+1 day / Problem
Someone encounter unexpected problem.	ALL	Consult with PM , give him short rest.	+2 day / Problem

Appendix

- spread sheet

- gantt chart