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# Overview

## Project Summary

### Purpose, Scope, and Objectives

The purpose of this plan is to completely outline the project requirements to build the B&B Reservation System. The system will be used to hold reservations for customers and track expenses.

This plan applies to the software development team under the parent company.

The objective is to encode a reliable reservation system with reasonable development cost, timely delivery, software quality, and functionality.

### Assumptions and Constraints

This plan assumes the user will have a PC with Windows 7 and Java 8 installed.

The plan must be completed within 2 months.

### 1.1.3 Project Deliverables

Software Requirements Specifications

Software Design Descriptions

Software Test Documentation

B&B System User Manual

B&B System Program

### 1.1.4 Omitted

## 1.2 Omitted

# References

Parent Company Style Guide SG001

Parent Company Software Project Management PM001

# Definitions

B&B Reservation System: The system desired by the customer to track reservations and expenses.

# Project Organization

## External Interfaces

The software development team routes all documentation up to the parent company for quality assurance and review.

## Internal Structure

The team will be split into a programming team, planning team, quality assurance, and testing.

## Roles and Responsibilities

The programming team will be responsible for all encoding projects to include scripts for testing purposes.

The planning team will generate all planning documents with the aid of other teams as needed.

Quality assurance will manage all reviews. Quality assurance will determine if a milestone has been met.

The testing team will perform the test cases. They will also assist the planning team in developing the test plan.

# Managerial Process Plans

## Omitted

## Work Plan

### Work Activities

### Develop Software Requirements Specification (5 days)

The planning team in association with the development team will initiate developing the SRS. The first item is garnering a statement of need from the customer.

* + - * 1. Draw Architectural Context Diagram

Next, the team must draw an architectural context diagram. This should be a very basic overview of the system.

* + - * 1. Draw Data Flow Diagram Level 0

The team can then draw a data flow diagram that depicts subsystems and processes needed to fulfill the system requirements.

* + - * 1. Create Class Diagrams

Using the DFD and ACD, planning team can define classes that must be created based on the subsystems and process defined earlier.

* + - * 1. Develop Use Cases

The planning team will look at the system theory they have designed and create at least 2 use case scenarios that a user might go through.

* + - * 1. Review SRS with Customer

Once the SRS is complete, review the product with the customer to ensure all requirements are met.

### Develop Software Design Description (5 days)

Following the SRS, the planning team will start designing the software descriptions. The plan will follow PM001 requirements.

* + - * 1. Update ACD

The new software descriptions might change the system architecture, so the team must update the ACD. This ACD will be sent to quality assurance for review.

* + - * 1. Draw DFD L1/L2

The data flow diagrams must be further defined, so all process will be captured. The team must define a DFD to at least level 1. Refer to PM001 for depth requirements. Send to quality assurance for review.

* + - * 1. Design GUI Concept

The GUI must be designed at this stage. Use design software to place buttons and text fields that will be shown to the customer. All system capabilities must be reachable within the GUI. Send to quality assurance for analysis.

* + - * 1. Define Interface Protocols

In this phase, the team must define how each subsystem will interact with the others. Define how the information will be formatted when sent to other systems.

* + - * 1. Review SDD

The planning team, development team, and quality assurance will review the SDD. Quality assurance will provide assessment notes for the ACD, DFD, and GUI at this time.

### Develop Software Test Specification (4 days)

The planning team in conjunction with the testing team will develop a software test specification. General requirements are outlined in PM001.

* + - * 1. Test Cases

This specification will make use of test cases. The team is to develop at least 4 test cases. Of these 4, at least 2 will be white box and 2 will be black box. At least 1 test case will stress the system with a large number of random inputs.

* + - * 1. Write scripts for test cases

Some test cases might require scripts to perform. The testing team will write these scripts as needed.

* + - * 1. Review STS with Quality Assurance

The planning, testing, and quality assurance team will review the STS at this time. Ensure the STS fulfills all requirements in PM001.

* + - * 1. Merge with Programming Team

With the exception of quality assurance, all teams will join the programming team once the STS is finalized. Quality assurance will analyze the code as it is written by others.

### Write Program Code (25 days)

Upon completion of the SDD, the programming team will commence encoding the system. Quality assurance will perform periodic reviews and sampling as defined by PM001.

### Formal Code Review (1 day)

Once the system is programmed, quality assurance will take the source code to a third party for a formal code review. The report will be shared with parent company.

### Perform System Tests (2 days)

The testing team will perform system tests as defined by the STS. All errors will be routed to quality assurance and the programming team.

### Code Corrections (7 days)

Any errors reported by the testing team will be corrected at this time. They system will be tested again until no errors are found.

### Final Review with Customer (1 day)

The user will be invited to trial our system in house with all teams present. If the customer requests any changes, parent company must approve them before they are accepted.

### Final Code Corrections

Anything that the customer requested changed that the parent company approved will be programmed at this time. Send to quality assurance for final review.

### Deliver Product

Send the final program to parent company for packaging.

### Schedule Allocation



### Resource Allocation

Planning team

Senior Project Manager 1

Project Assistants 2

Testing team

Senior Test Analyst 1

Test Analysts 2

Test Technician 2

Quality Assurance

Senior QA Controller 1

QA Controller 1

Programming team

Senior Software Engineer 1

Software Engineers 2

Software Technicians 2

### Omitted

## 5.3 Omitted

## 5.4 Risk Management Plan

General risks are specified in PM001. Below are specific risks with this project.

### 5.4.1 External Interface Incompatibility (.8)

This is a risk that our internal credit card authorization system will not work with the external credit card authorization system. This risk can be mitigated by taking cash and allowing manual entries. If this occurs, the system will no longer be able to process credit card transactions. This could severely disrupt business and must be attended as soon as possible.

### 5.4.2 Testing Failures (.5)

This is a risk that the testing phase will uncover too many errors to correct in time. To mitigate this, the quality assurance team will perform thorough reviews as the project develops.

## 5.5 Omitted

# Technical Process Plans

## Process Model

A Linear-Sequential process will be followed for the project.

## Methods, Tools, and Techniques

The program will be developed in the Java programming language. Any libraries up to SDK 8 can be used.

## Omitted

## Omitted

# Omitted

# Omitted