BIT services

Version: 1.0

Prepared by: Scott Shelley

17 June 2016

Table of Contents

1 Background and project charter

1.1 Background

BIT (Business Information Technology) provides IT support services for companies with hardware, software trouble-shooting, new installations, periodic IT audits and more for approximately 2,500 users in Australia. BIT has 5 coordinators staff with over 100 field contractors.

BIT is currently using a paper based system with phone and fax-based systems that is making a number of Issues, which are inaccurate absolute information, missing or lost information, also poor speed of access and cumbersome access to information and time consuming manual processing.

BIT current roster system is inadequate and a significant time-waster and a nightmare for BIT Staff, and is difficult to update the roster when a staff become unavailable, call on sick or experience car problems, a lot of time-consuming and challenging to change a roster because it affects everything else. It is difficult for BIT staff to locate someone roster information as it all kept in a paper based file system. The tele-clocking system does not capture any qualitative comments, a lot of time is spending in the reconciliation and trouble-shooting and field contractors are quite frustrated with the functional gaps.

BIT payroll and financial teams are really not impressed by the way we administer the client and contractor's relationships, they are frustrated by the significant amount of corrections and adjustments to undertake, they are also concerned about the compliance and governance issues that BIT haves. Clients are not happy about the lack of feedback on their requests, and when this happens, it is very difficult to understand job status.

1.2 Intended audiences and key stakeholders

Stakeholders:

- **Management:** Ralph Jones, Sabrina Benson, Gary Andrews, Laura Dannis and John Peters
- **Users:** Ralph Jones, Sabrina Benson, Gary Andrews, Laura Dannis, John Peters and 5 Coordinators
- **End-users:** 5 Coordinators and 100 Contractors

Source of Information:

- **Stakeholders**
- **Existing documents:** Microsoft Word, Paper based system, files

1.3 Project charter

BIT Services System

Element	*Description*
Brief Description:	BIT services have ask us to develop them a stand-alone computerized system, to help BIT in fixing their problems and helping them to expand and grow in size.
Background:	BIT (Business Information Technology) provides IT support services for companies with hardware, software trouble-shooting, new installations, periodic IT audits and more. BIT is currently using a paper base system with phone and fax-based systems that is making a number of Issues, which are inaccurate absolute information, missing or lost information, also poor speed of access and cumbersome access to information and time consuming manual processing.
Goals/Deliverables:	The objective is to have a computerized system to run on Windows workstation base, website base and a mobile phone application. To fix as many problems and issues BIT is having.
Scope:	**Within Scope:** • Manage Client • Manage Request • Manage Activity • Manage Contractor **Out of Scope:** • Worldwide networking system • Mange Rosters • Mange Payrolls • Mange Payment
Stakeholders:	**Managing Director:** Ralph Jones **Marketing Manager:** Sabrina Benson **Service and Support** Manager: Gary Andrews **Sales Manager:** Laura Dannis **Admin Director:** John Peters

Milestones:

Key Milestones	Start date	End date
User Requirement Definition Report	25/04/2016	2/05/2016
Feasibility Study Report	3/05/2016	6/05/2016
System Requirement Spec Report	9/05/2016	14/05/2016
System Design Spec Report	16/05/2016	20/05/16
Tested Program & User Manual	24/05/2016	22/06/2016
User Acceptance Report	23/06/2016	29/06/2016

Budget: BIT Services budget is $30,000.00 within this project.

Risks:

- Schedule flaws
- Requirements inflation
- Employees turnover/leaves
- Specification breakdown
- System fails to meet the expectation

Constraints:

- Time constraint
- Budget constraint
- Labor constraint

Assumptions:

- We assume that the system will fix their BIT issues.
- We assume that the user's found that the new system Will be easy to use and understand.
- We assume that hardware is not functional.
- A slow-growth economy, without major recession.
- That there are no unforeseen changes in technology to make products immediately obsolete.

Success Measurements: We are taking all measures to develop this new system, right from user requirements and specifications to implementation.

2 Project plan

2.1 Overview

BIT field support services has asked our team to develop a computerized system with a Windows workstation system, website base system and Mobile phones system. To fix the current system problems and issues, also to improved and grow BIT business.

A cross-platform system to support the following essential production functions:

- Online website
    - Client login – view contractors that is assign to an activity and send job request.
    - Contractor Login – view the jobs that they are assign to with client detail, and send request to BIT to change the status of the job completed.
    - Staff Login – assign a contractor to a job, view contractors completion status and staff members can change the status to completed.
- PC-based
    - Admin login – Add, update and Delete Coordinators, Contractors and Clients.
    - Coordinator login – Add, update and Delete, Contractors and Clients.
    - Assign a contractor to a job for a client – from Coordinator or admin.
    - Client request a field support activity – from Coordinator or admin.
    - Client and Contractor login – view and update certain information. (**extra feature**)
- Mobile phone app
    - Contractor Login – view the jobs that they are assign to with client detail and upload their services hours and job completed status for a job.
- A central database
    - Store client and staff information.
    - Mange and store request for new field support activity's.
    - Mange and store field support activity.
    - Mange and store contactors information and job skills.

2.2 Objectives

The object's is to Computerized BIT current paper base system into a central system with a Windows base system, website base system, mobile phone system and a central database system for all those three previous systems for data storage.

The specific objectives of this project are

- Update to current technologies and equipment.
- Improve client's relationship with contractors.
- Fix and improve BIT Services problems.
- Develop a client desktop application.
- Develop a cloud base application.
- Develop a mobile phone application.
- Central backend database for all application.

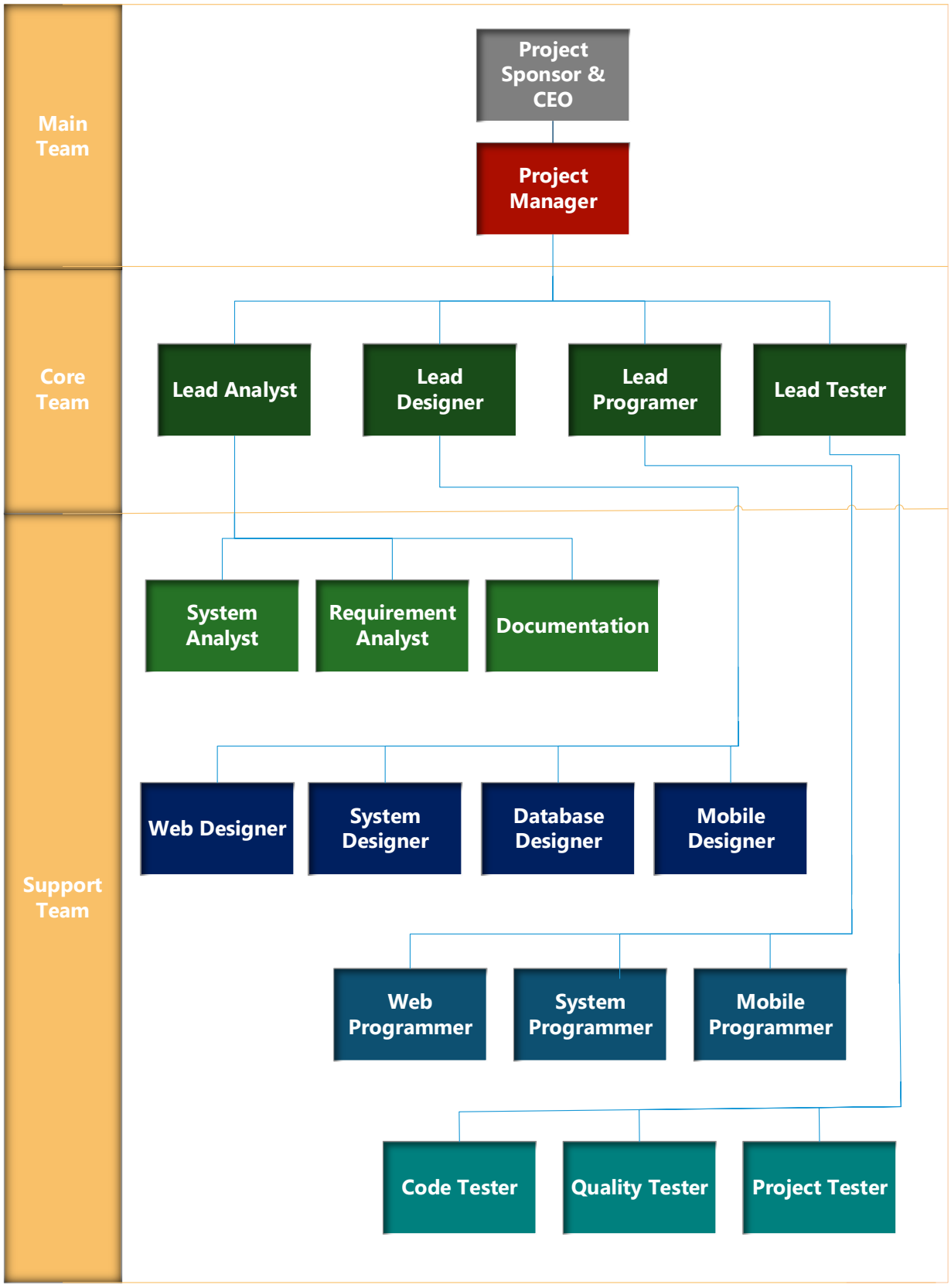
2.3 Scope (in-scope, out-of-scope & assumptions)

- ✓ **Within Scope:**
  A stand-alone computerized system with the following business functions are
  - Manage Client
  - Manage Request
  - Manage Activity
  - Manage Contractor
- ✓ **Out of scope:**
  - Worldwide networking system
  - Mange Rosters
  - Mange Payrolls
  - Mange Payment

2.4 Success factors and their measurement

Success Factor	Measurement
Complete the project on time	• We will schedule the project and keep track of the project progress • We will be using WBS and Gantt Chart • Checking the milestones are complete before moving on
Complete the project in budget	• We check the budget every week and make budget control plans to see and make sure that we won't go over budget
An cloud application (website) is develop	• Must have a basic layout • Must have multiple logins of three types of users • Must be able read, add and update records from the database
An client server application is develop	• Must be able to connect to the database • Four types of logins into the system • Must be able to add all users • Must be able to update all users • Must be able to inactive or active all users • Must be able to add client request and job assignment for contractors
An mobile phone application is develop	• Must be able to access from a smart phone • Must be able to read and add records form database
An centralized database for the three Application's above	• Must allowed the applications to connect to the SQL database hosted on a server • Must have store procedures that the applications can access

2.5 Team chart



2.6 Timeline, formal sign-offs and key milestones

Project Title: BIT Services System
Project Duration: 2 Months (12 weeks)
Start Date: 25/05/2016
Finish Date: 29/06/2016
Schedule From: Project Start Date
Note: This project is mainly done on weekday only unless needed

T#	Task Name	Duration	Start	Finish	Predecessors	Milestone
T1	**User Requirement** Data Gathering Report Preparation UR Report Presentation	6 days 3 days 1 day 1 day	25/04/2016	2/05/2016	None	**User Requirement Definition Report**
T2	**Feasibility Study** Cost-Benefit Analysis Report Preparation	4 days 2 days 2 days	3/05/2016	6/05/2016	T1	**Feasibility Study Report**
T3	**System Analysis** Data Gathering Data Analysis Analysis Report Preparation	5 days 2 days 3 days 1 day	9/05/2016	14/05/2016	T2	**System Requirement Spec Report**
T4	**System Design** Preliminary Design Detail Design Design Report Presentation	5 days 2 days 3 days 1 day	16/05/2016	20/05/16	T3	**System Design Spec Report**
T5	**System Development** Writing Code Testing Code Writing User Manual	22 days 11 days 5 days 3 days	24/05/2016	22/06/2016	T4	**Tested Program & User Manual**
T6	**System Implementation** System Installation User Training System Handover	5 days 2 days 2 days 1 day	23/06/2016	29/06/2016	T5	**User Acceptance Report**

Please find the sign-off letter in Appendix A and the Gantt Chart in Appendix B

2.7 Communication and project tracking strategies

Step 1 – Notifying the audience which will be attending the meeting, with 3 to 5 days of notified.

Step 2 – Holding the meeting and disgusting the topics that needs to be dressed and mention in the meeting.

Step 3 – Report of the meeting with a summary and action/to-do list of the meeting, that gets recorded and get sent an email to the appropriate people and who attended the meeting.

Communication Type	Objective of Meeting	Project Part	Meeting Type	Frequency	Participants	Reporting	Sharing Method
System Design Meeting	Review the design of the system.	System Design	Conferencing	Once a month	All System Design Team members, Project manager, a Client Representative	Summary of the meeting in Report form	As an attachment to email
Development Progress Meeting	Reviewing the project if it in progress and no delays.	System Development	Conferencing	Once a fortnight	All lead programmers and Project manager	Summary of the meeting in Report documents	As an attachment to email
In Scope Meeting	Review the Scope of the project.	System Analyst	Conferencing	At the beginning of the project	All System Analysts, Project manager and all stakeholders	Summary of the meeting in Report document	As an attachment to email
Quality Control Meeting	Checking the feedback from clients for a high quality.	System Analyst and System Design	Conferencing	Once a fortnight	All System Analyst, Design members, Project manager, a Client Representative	Summary of the meeting in Report document	As an attachment to email
Progress Report Meeting	Checking to see if the project in schedule and budget.	Project Development	Conferencing	Once a week	Lead Programmers and Project manager	Summary of the meeting in Report document	As an attachment to email

2.8 Change management strategies

These steps are for a change request from a stakeholder or stakeholder's in order to implement a change for the system.

1. **Reasons of change** – List the change requirements and the reasons to change such as performance gaps, new technology or a shift in the organization.
2. **Define the scope of change** – Describe and Lists the scope of the change.
3. **Stakeholder** – List all stakeholders that will be affected by the change and getting the stakeholder approval and Signature on the Change Request Form. Draw up a plan access the risks and concerns that is involved
4. **Creating the team** – Creating and choosing the right people to undertake the change, this team is also responsible for communicating with the stakeholders, listening their concerns and ensuring that the change goes as smoothly as possible.
5. **Develop an approach** – Develop a plan to start developing in the change of the system, with a project plan of schedule and budget plans.
6. **Design the system from the change** – Designing the system from change requirements with feedback from the stakeholders. Drawing UML diagrams to represent the changed system.
7. **Developing the change system** – Developing the changes to the system.
8. **Implementation of the system** – implement the changes to the system with receiving feedback and a sign-off from the changed.

Please find Appendix A for Change Request Form

2.9 Project costs and ROI analysis

The budget isn't set yet but we are estimating that this project is going to cost around $30,000

Return on investment calculation - BIT Services system

	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*	*Total year*
Cost	$25,340	$2,000	$5,000	$1,500	$500	**$34,340**
Net profit	$26,000	$30,000	$35,000	$39,000	$42,530	**$172,530**
ROI ($)	$660	$28,000	$30,000	$37,500	$42,030	
ROI (%)	2.60%	1400%	600%	2500%	8406%	

ROI ($) = Net Profit – Cost

ROI (%) = (Net Profit - Cost) / Cost

Please find Appendix C for ROI Grahp

2.10 Risks, risk management and contingencies

These risks may impact and low the project down, in order to avoid and not to run into these risk we made a risks plan and contingency plan.

Risk Management is the plan to avoid the risks from happening.

Contingencies is what will happen if a risk item happened.

Risks	***Risk Level***	***Likelihood of Risk***	***Risk Management***	***Contingencies***
Project phase completion checking & monitoring	Medium	Unlikely	Increased the checking and monitoring in each phase, monitoring progress in project and reviewing each phase.	Checking each phase before moving to the next phase and monitoring every phase. Going back to the previous phase if necessary.
Schedule flaws	High	Likely	Get the development team more involved in planning and estimating, and getting feedback from stakeholders.	Analyzing the requirements and project plan more clearly.
Requirements inflation	Low	Unlikely	Constant involvement and interactions of the stakeholders and developers in feedback and review.	Get the stakeholders more involved in the requirement analyze.
Employees turnover/leaves	Medium	Likely	Increased collaboration and information sharing in the team by monitoring progress.	Programmers writing proper project documentation’s and UML diagrams.
Specification breakdown	Medium	Unlikely	Checking the requirements are defining at the beginning of the project from the stakeholders.	Interviewing the stakeholder(s) to check the requirements.
System fails to meet the expectation	Low	Unlikely	Monitoring progress and reviewing the requirements and getting feedback from the stakeholders.	Reviewing the requirements and expectations and apply them to the system.

3 Development Methodology chosen for the project with reasons

The methodology that we are using is Agile with prototyping because it best suits BIT Services situation. BIT Services is willing to put a lot of their time into this project/system for a high quality outcome. Each phase will be send off to BIT Services to check off and get feedback with review. It will result in a high output and quality and if it doesn't meet the requirements or expectations, we will fix the problem or issues unstill it does.

We are implementing employee's information, client's information including multiple locations, client request for one or many field support activities, field support activities, contractor's assigned with also services hourly and km basis worked and travelled, contractor job IT skills and contractor's activities request to coordinators. Not implementing rosters, job payments, payrolls and admin reconciliation.

Sprints implement first to last:

1. Employees
2. Client's
3. Request
4. Field support activities
5. Contractors.

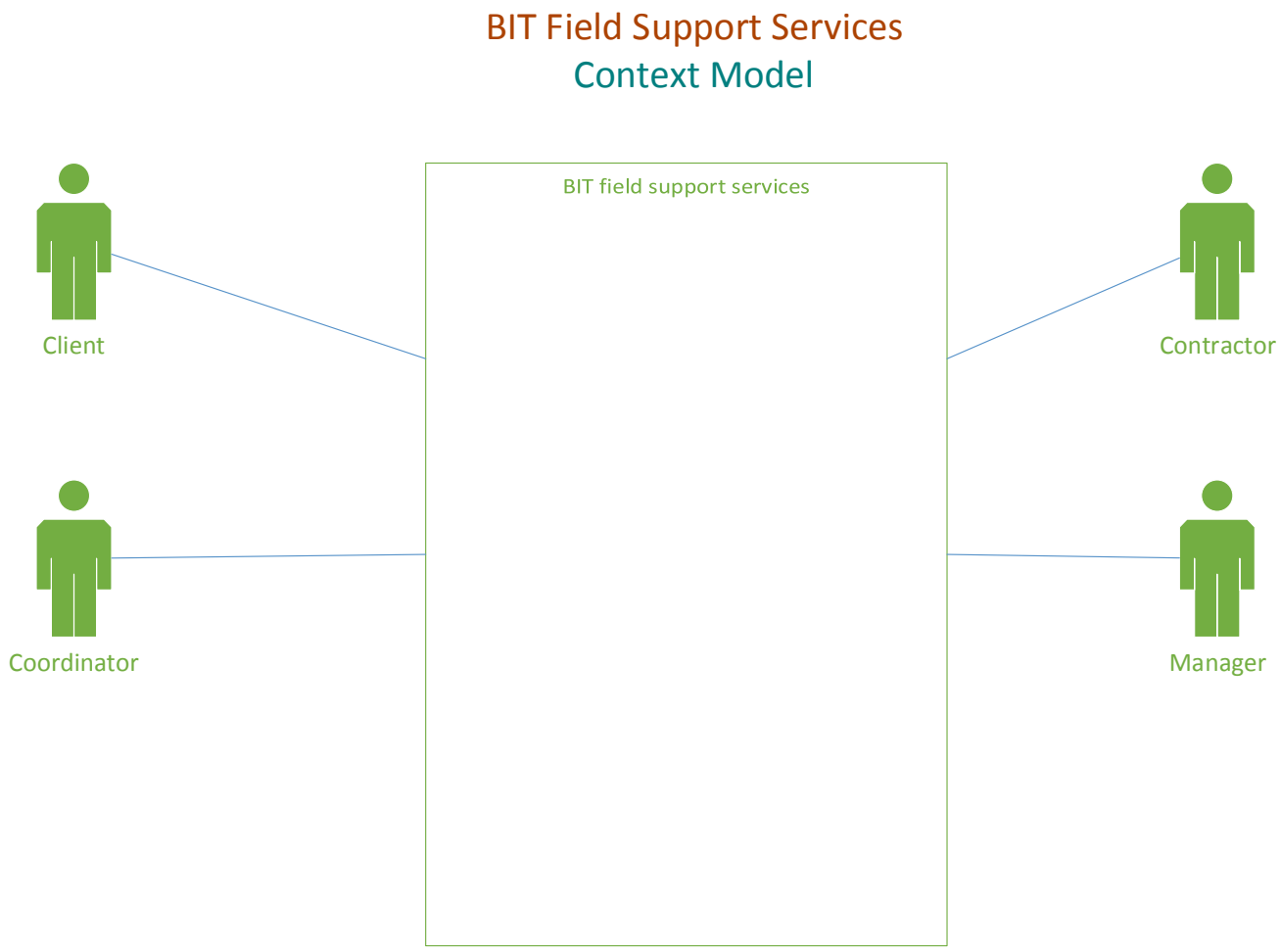
Reason for choosing Agile as the Methodology

Agile will allow for changes if the requirements changes or stakeholders change their mind at any stage of the development, and/or if software or hardware changes as well. It will give us cost control, flexibility, visibility and project control progress over the project. Agile as a good risk management that will help to identify and reduced the risks and issues it may have in the project. Better product quality with good design and sustainable development. We will have a higher customer satisfaction by keeping customers engaging and getting involved throughout the project.

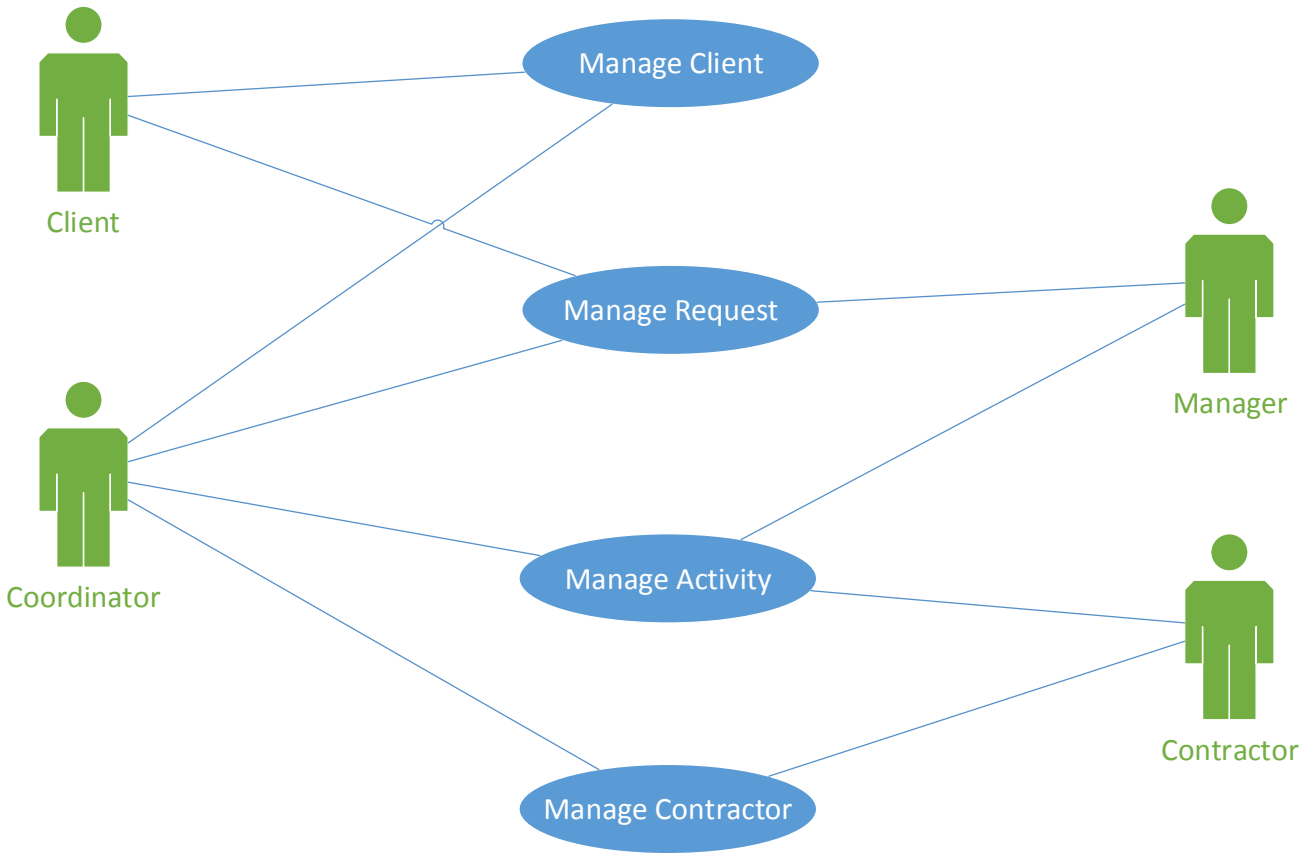
Using prototyping will get the stakeholders and users actively involved in the development process by giving them a working model of the system to get a feeling of the system, and try it. Then obtain user feedback on the prototype, which will assist us identifying any missing and improving functionality of the system.

4 High-level solution diagrams (UML format)

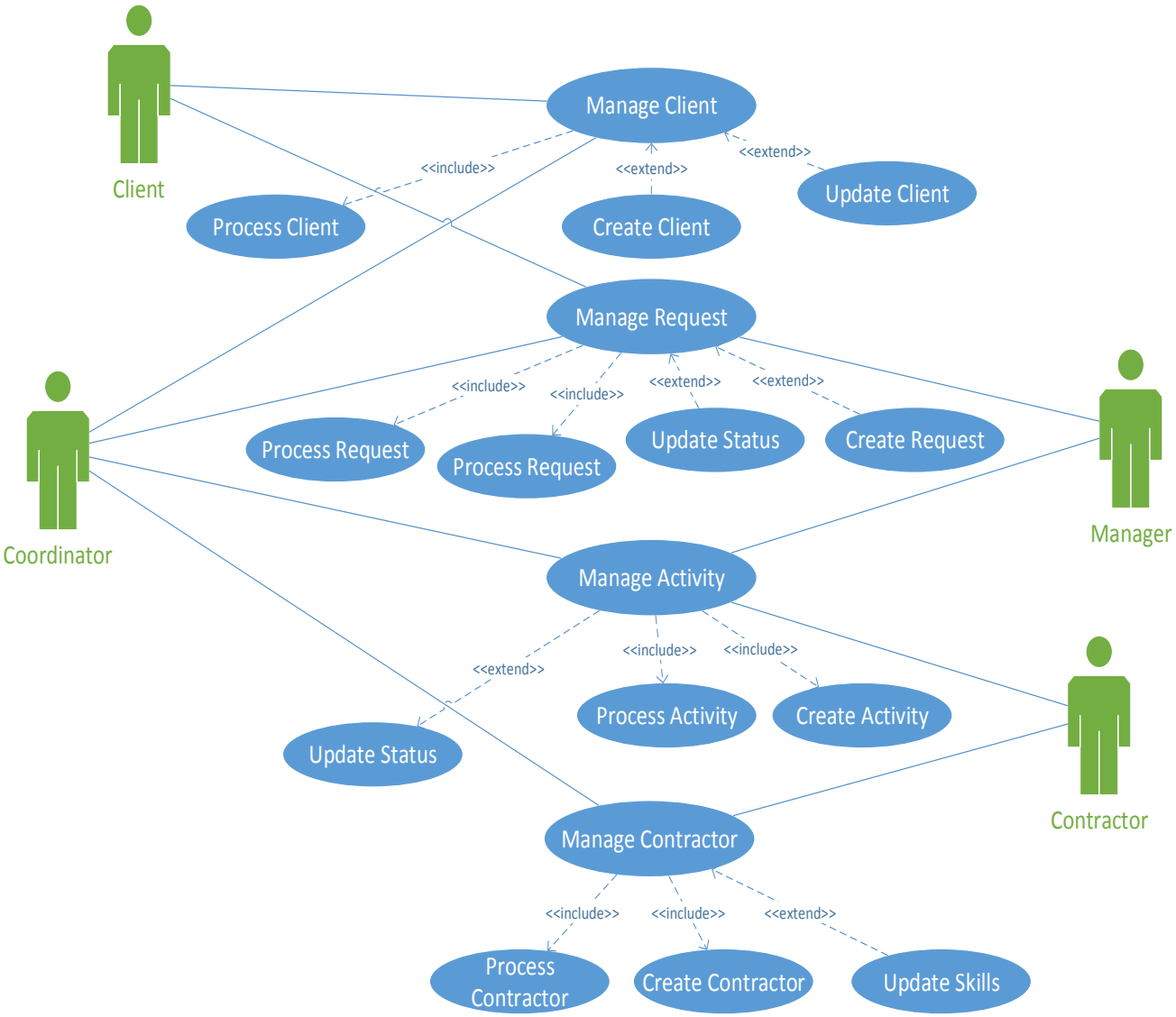
4.1 Behaviour – Use case Diagrams



BIT Field Support Services
High Level Use Case Diagram



BIT Field Support Services
Low Level Use Case Diagram



4.2 Behavior – Use case narrative

Use Case: Manage Client

1. **Brief Description:** This use case describes how a Client are managed in the BIT system.

2. **Flow of Events:** This use case starts when a coordinator selects ‘’Manage Client” option from the main menu.

   2.1 **Main Flow:**

   2.1.1 The system displays the Manage Client on the screen.

   2.1.2 The coordinator selects on “Create Client” option from the menu.

   2.1.3 The system displays the Create Client form on the screen.

   2.1.4 The coordinator enters the Client details in the system. Then clicks on “Add Client” button.

   2.1.5 The system validates the data and if successful, saves the data in “Client” table in the database.

   2.2 **Alternative flows:**

   2.2.1 Rosters data validation failed.

   - Data validation failed or data missing. The system displays an error message on the screen.

   2.2.2 Client login validation failed.

   - incorrect username or password data. The system displays error message on the screen.

   2.3 **Exception flows:**

   None

3. **Associations:**

   3.1 **Actor(s)**

   - Coordinator
   - Client

   3.2 **Associations to other Use Cases**

   - None

   3.3 **Associations from other Use Cases**

   - None

4. **Preconditions:** None.

Use Case: Manage Request

1. **Brief Description:** This use case describes how a client ask for a request of services, is managed in the BIT system.
2. **Flow of Events:** This use case start when a coordinator selects “Manage Request” from the option in the main menu.

2.1 **Main Flow:**

2.1.1 The system displays “Manage Request” form on the screen.

2.1.2 The coordinator selects “Add Request” option from main menu.

2.1.3 The system displays “Add Request” form on the screen.

2.1.4 The coordinator enters the client request details in the system. Then clicks “Add Request” button.

2.1.5 The system validates and processes and save the data and promotes for the manager approval.

2.1.6 The manager clicks on “Approved”, “Declined” or “On Hold” button.

2.1.7 The system saves the data.

2.2 **Alternative flows:**

2.2.1 Campaign data validation failed.

- Data missing or incorrect data. The system displays an error message on the screen.

2.3 **Exception flows:**

None

3. **Associations:**

3.1 **Actor(s)**

- Client
- Coordinator
- Manager

3.2 **Associations to other Use Cases**

- Manage Activity

3.3 **Associations from other Use Cases**

- None

4. **Preconditions:** None.

Use Case: Manage Activity

1. **Brief Description:** This use case describes how field support activity are managed in the BIT system.
2. **Flow of Events:** This use case starts when a coordinator or manager selects ‘’Manage Activity” option from the main menu.

   2.1 **Main Flow:**

   2.1.1 The system displays the Manage Activity on the screen.

   2.1.2 The coordinator or manager selects “Add Activity” option from the menu.

   2.1.3 The system displays the Add Activity form on the screen.

   2.1.4 The coordinator or manager enters the Activity details in the system. Then clicks on “Add Activity” button.

   2.1.5 The system validates the data and if successful, saves the data in “Activity” table in the system database.

   2.1.6 The coordinator or manager selects “Update Status” option from the menu.

   2.1.7 The system displays the Update Status form on the screen.

   2.1.8 The coordinator or manager enters the Status details in the system. Then clicks on “Update Status” button.

   2.1.9 The system processes the data, and save the data in “Activity” table under status column in the database.

   2.2 **Alternative flows:**

   2.2.1 Job status data validation failed.

   - Data validation failed or data missing. The system displays an error message on the screen.

   2.3 **Exception flows:**

   None

3. **Associations:**

   3.1 **Actor(s)**

   - Coordinator
   - Manager

   3.2 **Associations to other Use Cases**

   - None

   3.3 **Associations from other Use Cases**

   - Manage Request

4. **Preconditions:** None.

Use Case: Manage Contractor

1. **Brief Description:** This use case describes how a Contractor are managed in the BIT system.
2. **Flow of Events:** This use case starts when a contractor selects ‘’Manage Contractor” option from the main menu.

   2.1 **Main Flow:**

   2.1.1 The system displays the Manage Contractor on the screen.

   2.1.2 The contractor or manager selects “Create Contractor” option from the menu

   2.1.3 The system displays the “Create Contractor” form on the screen.

   2.1.4 The manager enters the payment details on the screen and clicks on “Add Contractor” button.

   2.1.5 The system validates the data and if successful, saves the data in “Contractor” table in the system database.

   2.2 **Alternative flows:**

   2.2.1 Payment data validation failed.

   - Data validation failed or data missing. The system displays an error message on the screen.

   2.3 **Exception flows:**

   None

3. **Associations:**

   3.1 **Actor(s)**

   - Coordinator
   - Contractor

   3.2 **Associations to other Use Cases**

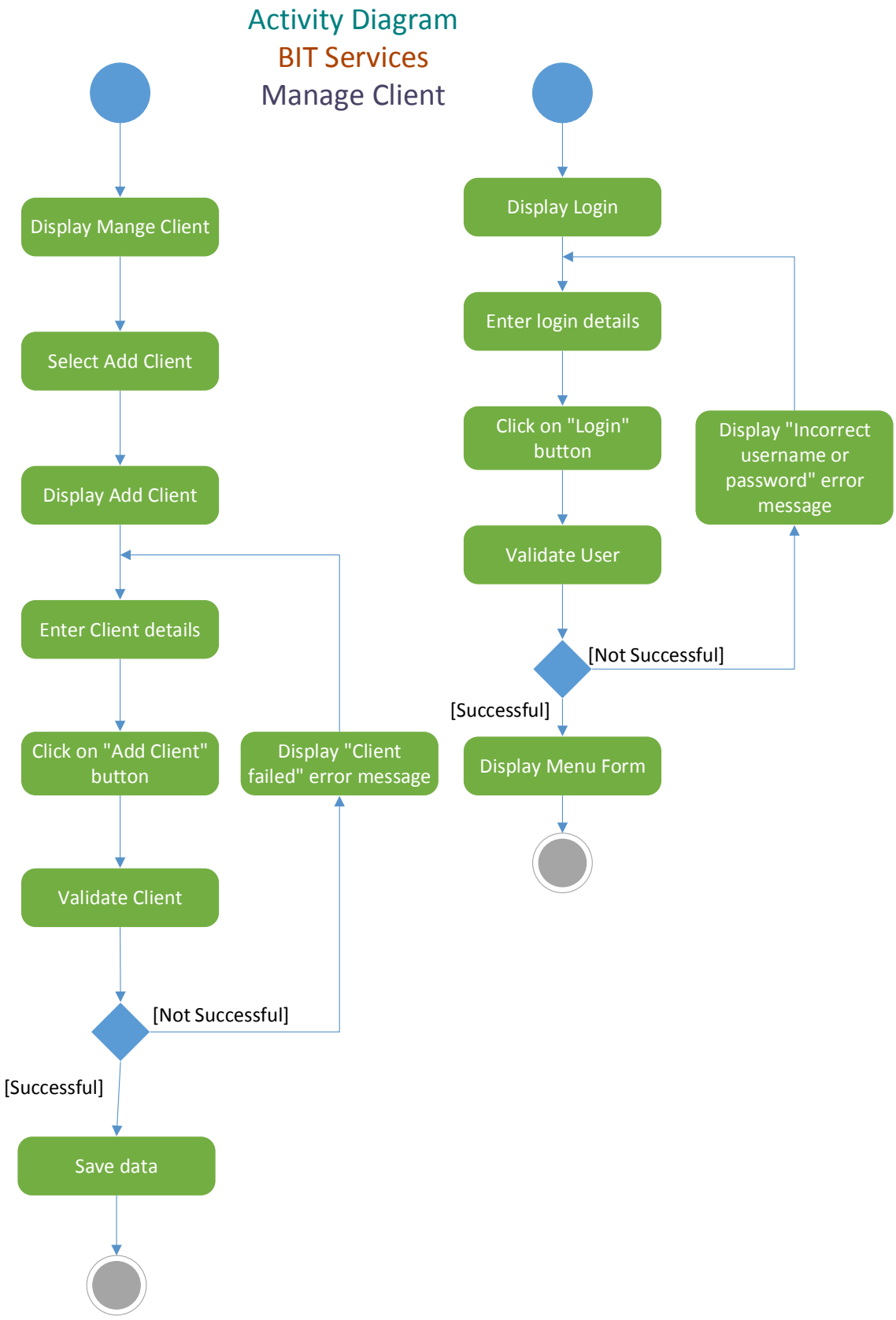
   - Manage Activity

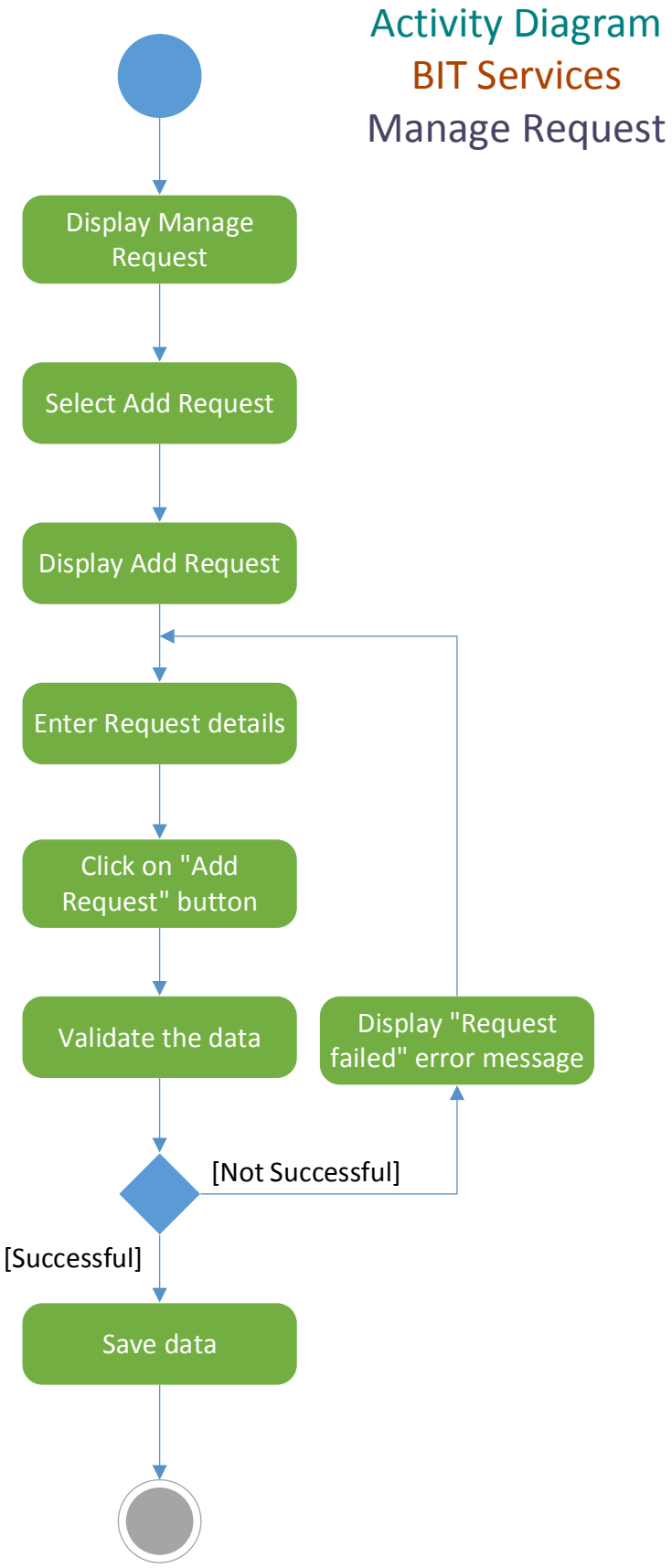
   3.3 **Associations from other Use Cases**

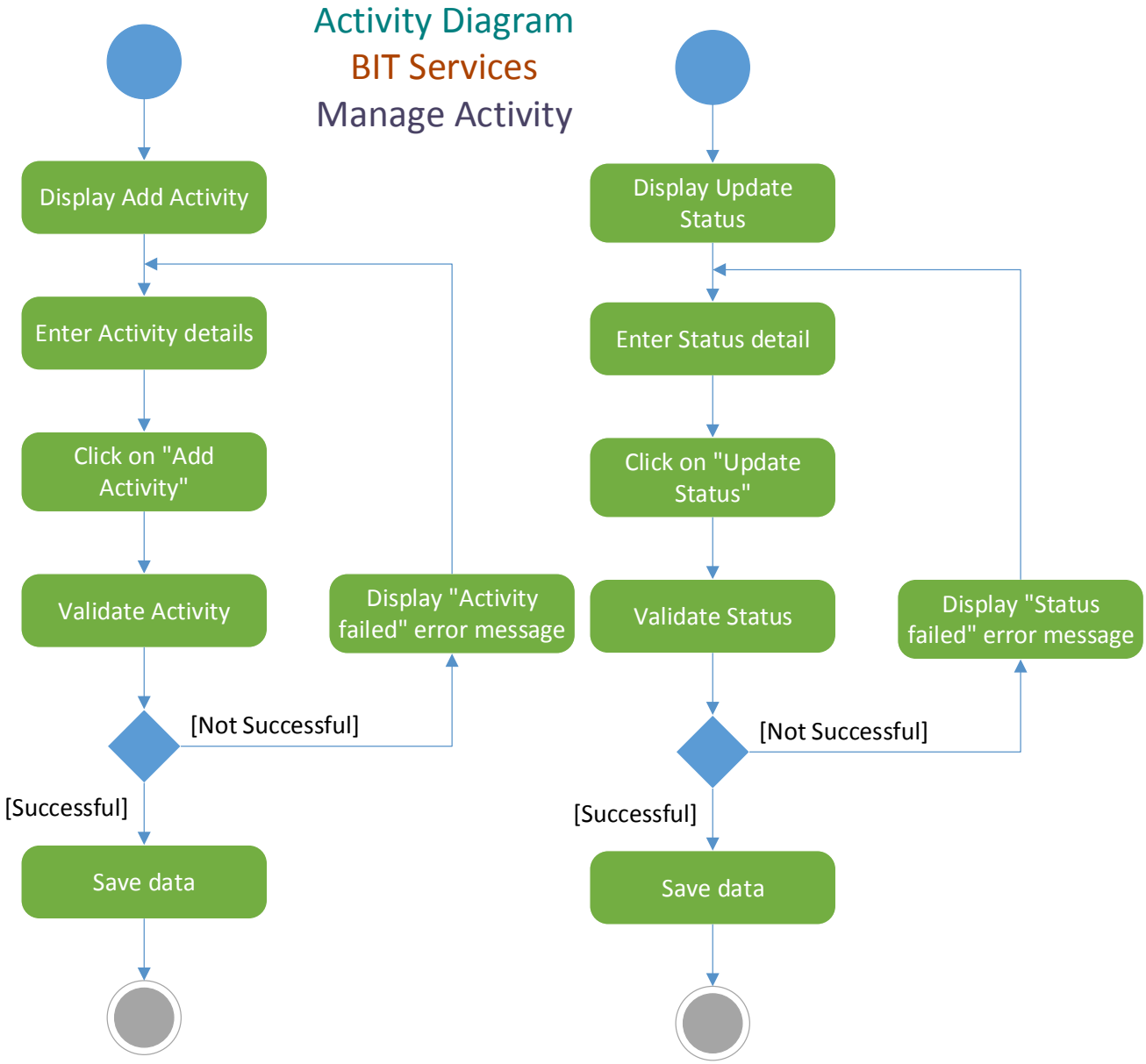
   - None

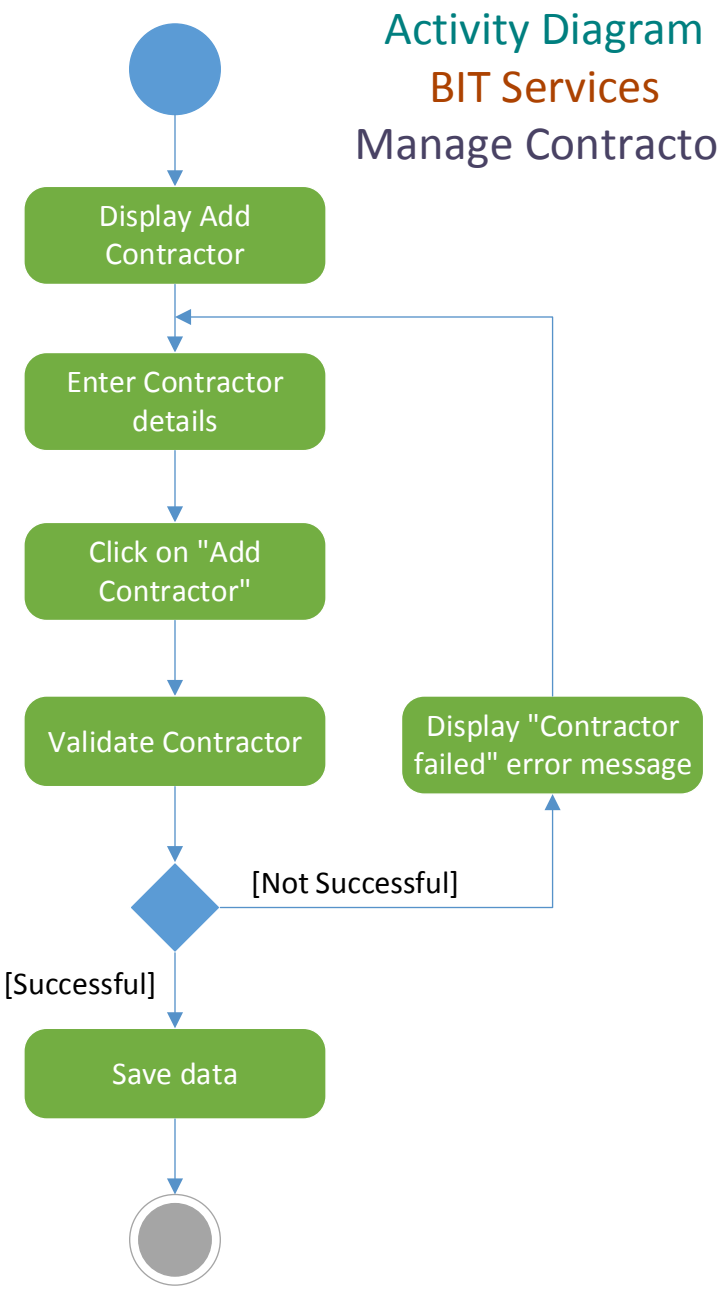
4. **Preconditions:** None.

4.3 Behavior – Activity Diagrams




Activity Diagram
BIT Services
Manage Request
Display Manage Request
Select Add Request
Display Add Request
Enter Request details
Click on "Add Request" button
Validate the data
Display "Request failed" error message
[Not Successful]
[Successful]
Save data

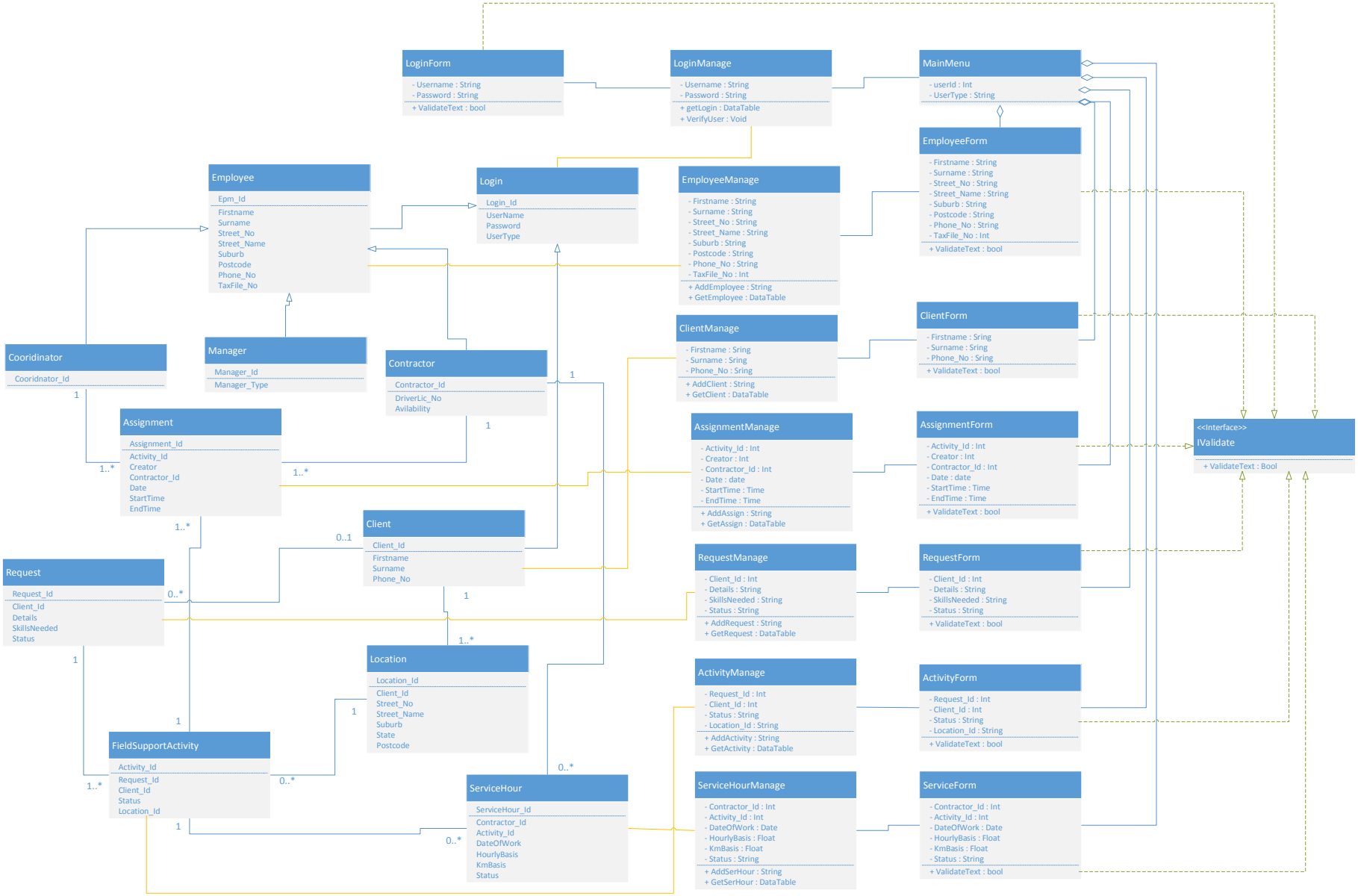

Activity Diagram
BIT Services
Manage Activity
Display Add Activity
Enter Activity details
Click on "Add Activity"
Validate Activity
Display "Activity failed" error message
[Not Successful]
[Successful]
Save data
Display Update Status
Enter Status detail
Click on "Update Status"
Validate Status
Display "Status failed" error message
[Not Successful]
[Successful]
Save data


Activity Diagram
BIT Services
Manage Contractor
Display Add Contractor
Enter Contractor details
Click on "Add Contractor"
Validate Contractor
Display "Contractor failed" error message
[Not Successful]
[Successful]
Save data

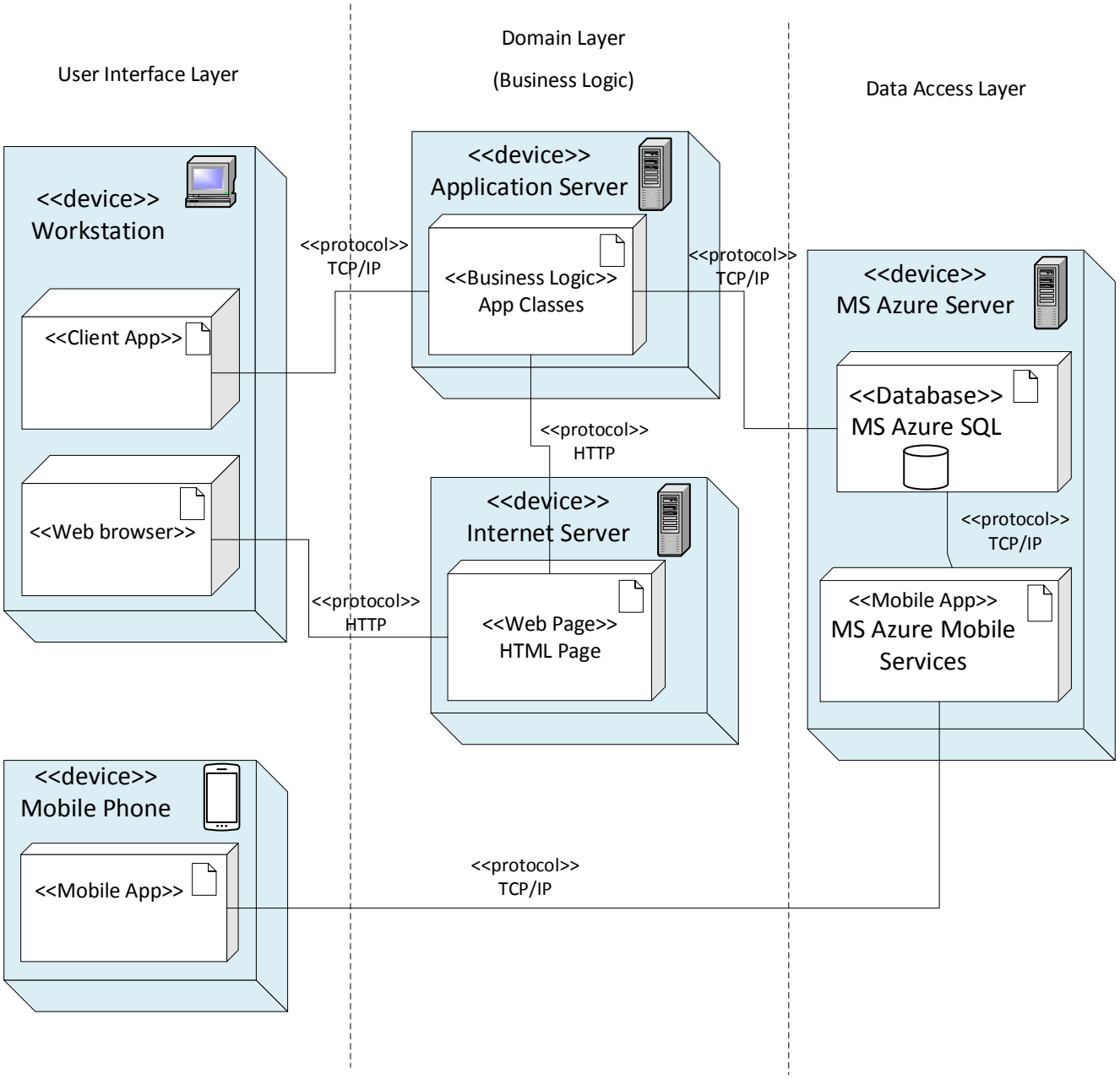
4.4 Structure – Class Diagrams

Static Diagram

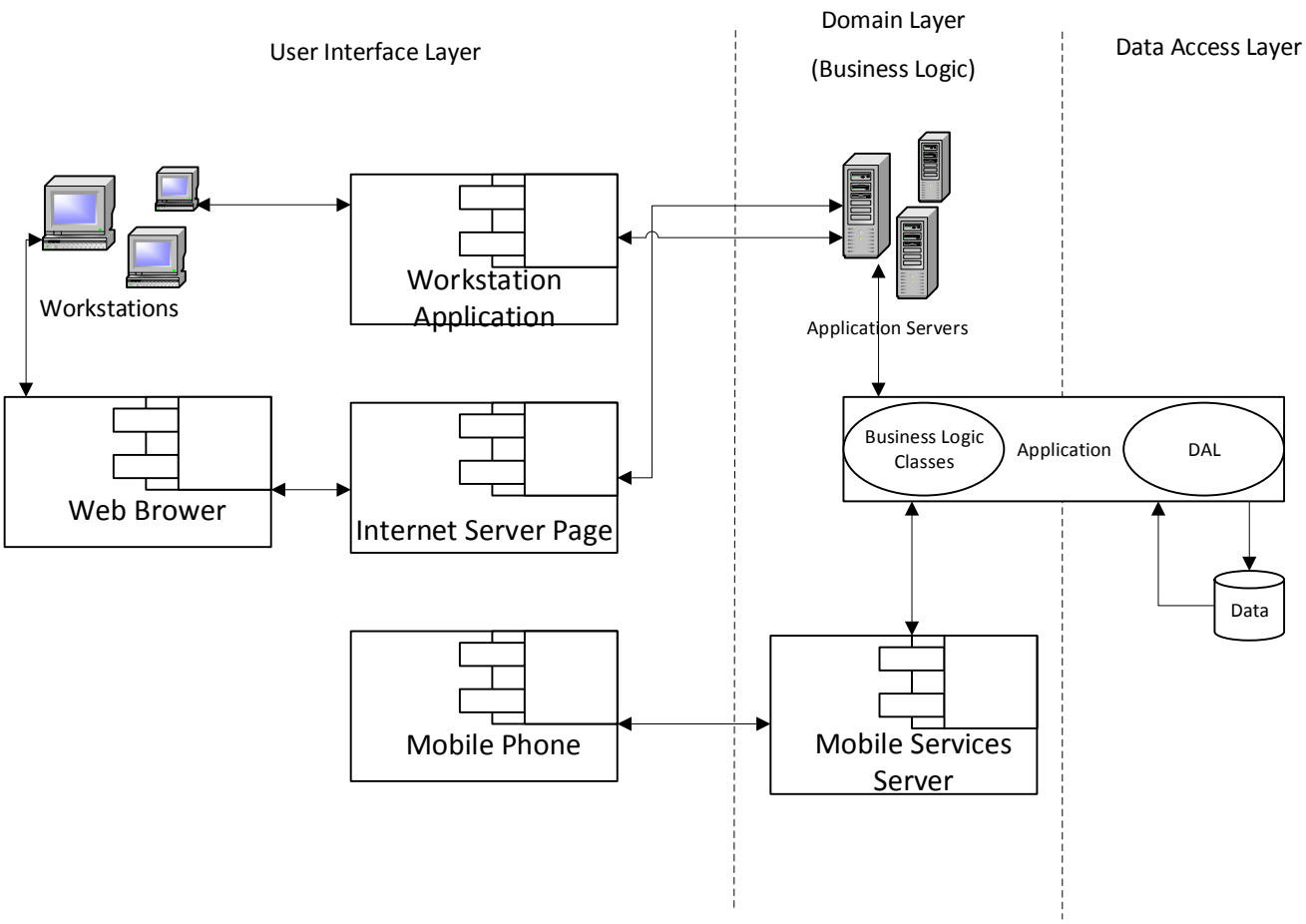
Design/Detailed Diagram



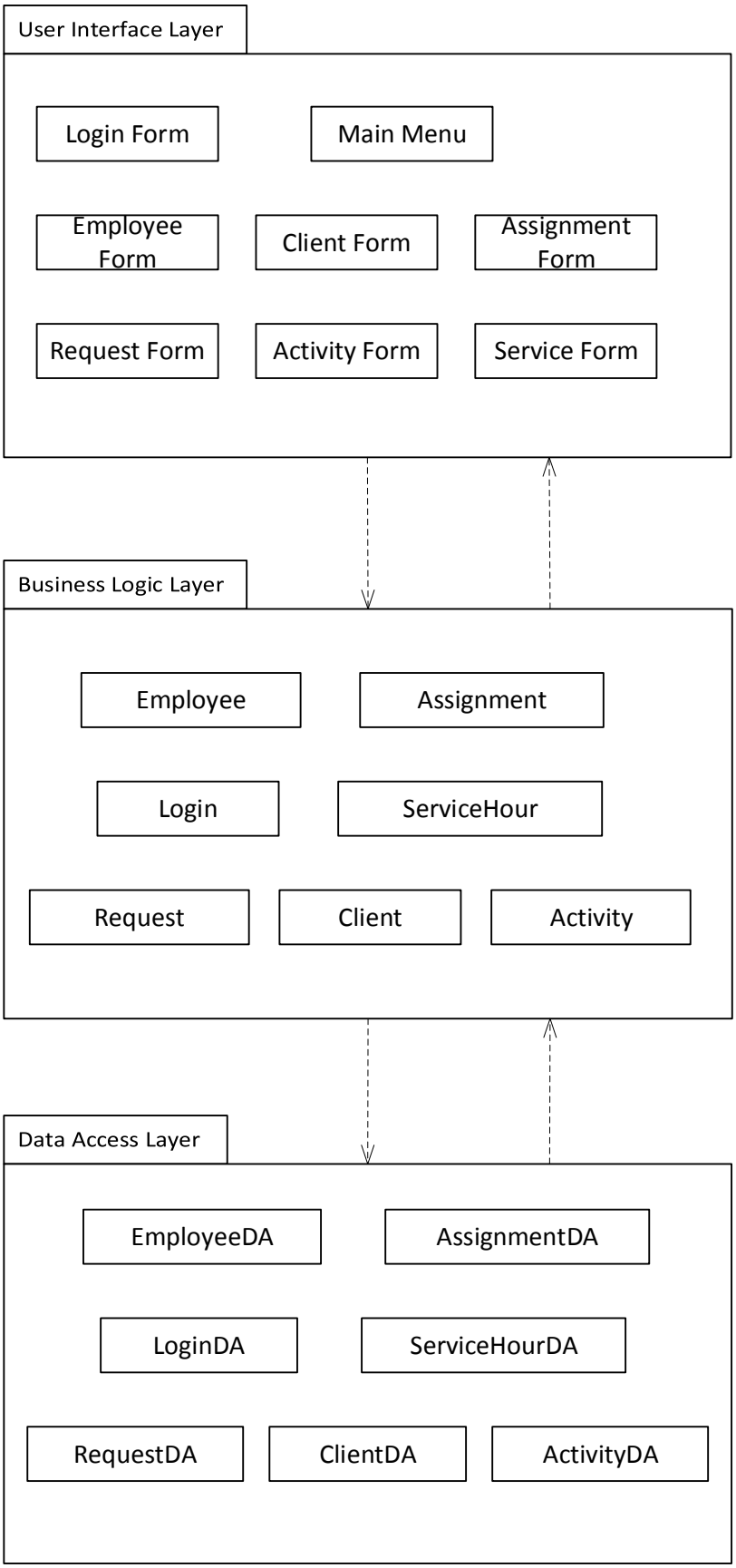
4.5 Structure – Deployment Diagram



4.6 Structure – Component Diagram



4.7 Structure – Package Diagram



5 Appendix

5.1 Appendix A – Sign Off Letter & Change Request Form

Date: 8 June 2016

Ralph Jones

Managing Director

Dear Ralph Jones

As part of our ongoing project with BIT in developing its Business Information System for your business, please find enclosed the Project Plan Report of the BIT for your consideration and approval.

We strongly believe that we have incorporated all your suggestions to meet the system requirements. However, we are happy to make any adjustment to this report should you find anything missing or necessary.

Please tick the appropriate box below, sign and return it to us at your earliest.

Yours sincerely

_____

(Signature)

Scott Shelley

Project Leader

Report Status

- ❑ Accept the report as it is.
- ❑ Accept the report with suggested amendments
- ❑ Reject the report as it does not satisfy the requirement

_____

(Manager's signature & Date)

Software Change Request (SCR) Form

SCR: _____

Change Request Initiation: (___) _____ Originator:_____

Date Submitted: ___/___/___ System Name: _____ Version Number: ____

Configuration Item: Software: _____ Documentation: _____

Change Type: New Requirement: _____ Requirement Change: _____

Design Change: _____ Other: _____

Reason: Legal: ____ Business: _____ Performance Tuning: _____ Defect: _____

Priority: Emergency: ____ Urgent: _____ Routine: ____ Date Required: ___/___/___

Change Description: (Detail functional and/or technical information. Use attachment if necessary.)

Technical Evaluation: (To be completed by Contractor. Use attachment if necessary.)

Received By: _____ Date Received ___/___/___

Assigned To: _____ Date Assigned: ___/___/___

Type of Software Affected:

_____

Modules/Screens/Tables/Files Affected:

_____

Documentation Affected:	Section	Page	Date Completed	Initial
Requirements Specification			___/___/___	
System Design Specification			___/___/___	
System Test Plan			___/___/___	
Training Plan			___/___/___	
User System Reference Manual			___/___/___	
System Maintenance Manual			___/___/___	
Other (Specify)			___/___/___	

Time Estimates: (To be completed by Contractor. Use attachment if necessary.)

Lifecycle Stage	Est. Time	Act. Time	Date Comp.	Remarks
Analysis / Design			___/___/___	
Coding / Testing			___/___/___	
Acceptance			___/___/___	
Total Hours:				

Impact Analysis Needed: Yes / No (If yes, include impact on technical performance, resources, schedule, etc.)

Approvals: Change Approved: _____ Change Not Approved: _____ On Hold: _____

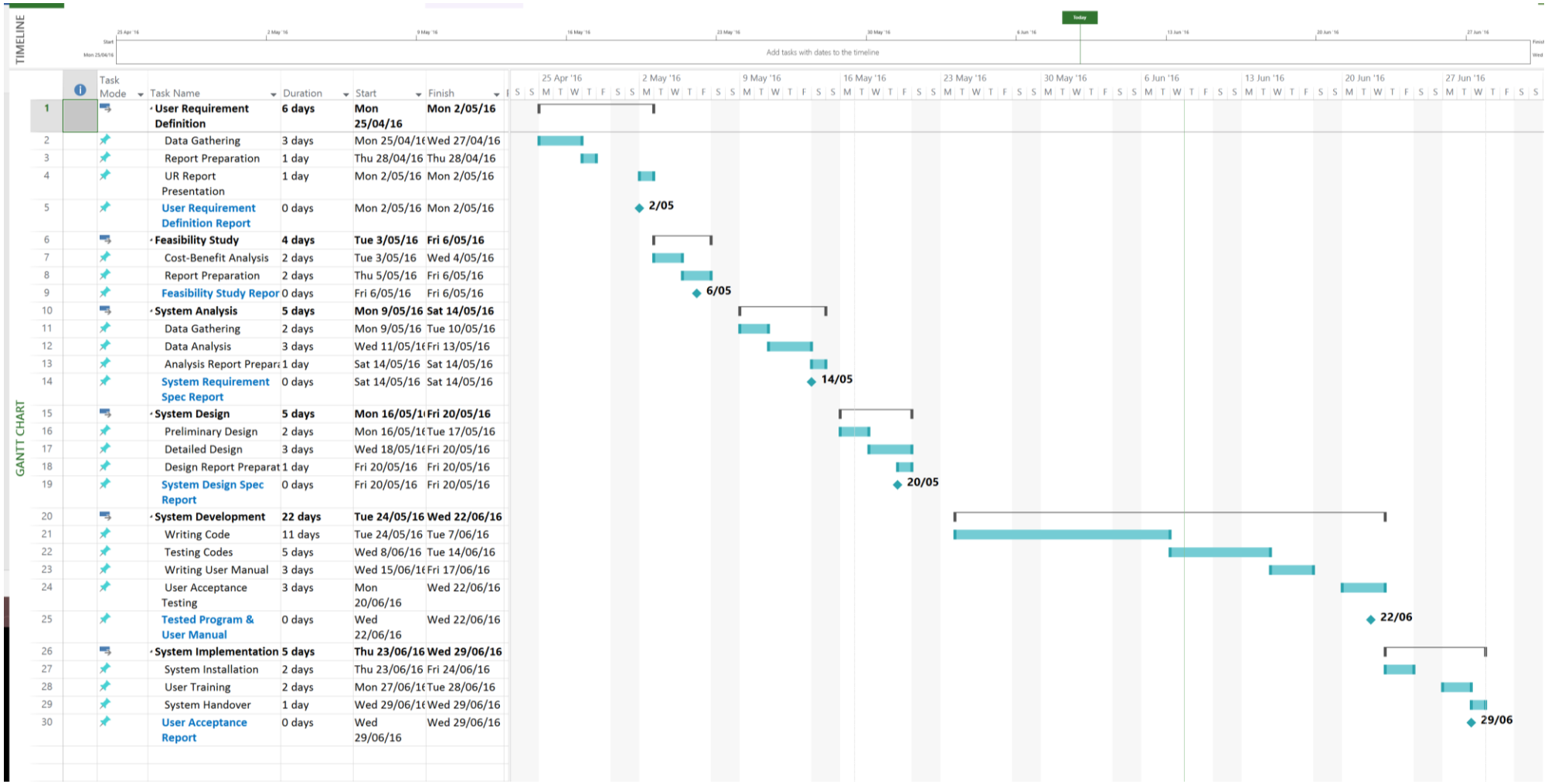
Name: _____ Job Role: _____ Signature: _____ Date: ___/___/___

Name: _____ Job Role: _____ Signature: _____ Date: ___/___/___

Name: _____ Job Role: _____ Signature: _____ Date: ___/___/

5.2 Appendix B – Gantt Chart

BIT Services Gantt Chart



	Task Mode	Task Name	Duration	Start	Finish
1		**User Requirement Definition**	**6 days**	**Mon 25/04/16**	**Mon 2/05/16**
2		Data Gathering	3 days	Mon 25/04/16	Wed 27/04/16
3		Report Preparation	1 day	Thu 28/04/16	Thu 28/04/16
4		UR Report Presentation	1 day	Mon 2/05/16	Mon 2/05/16
5		User Requirement Definition Report	0 days	Mon 2/05/16	Mon 2/05/16
6		**Feasibility Study**	**4 days**	**Tue 3/05/16**	**Fri 6/05/16**
7		Cost-Benefit Analysis	2 days	Tue 3/05/16	Wed 4/05/16
8		Report Preparation	2 days	Thu 5/05/16	Fri 6/05/16
9		Feasibility Study Repor	0 days	Fri 6/05/16	Fri 6/05/16
10		**System Analysis**	**5 days**	**Mon 9/05/16**	**Sat 14/05/16**
11		Data Gathering	2 days	Mon 9/05/16	Tue 10/05/16
12		Data Analysis	3 days	Wed 11/05/16	Fri 13/05/16
13		Analysis Report Prepar	1 day	Sat 14/05/16	Sat 14/05/16
14		System Requirement Spec Report	0 days	Sat 14/05/16	Sat 14/05/16
15		**System Design**	**5 days**	**Mon 16/05/16**	**Fri 20/05/16**
16		Preliminary Design	2 days	Mon 16/05/16	Tue 17/05/16
17		Detailed Design	3 days	Wed 18/05/16	Fri 20/05/16
18		Design Report Preparat	1 day	Fri 20/05/16	Fri 20/05/16
19		System Design Spec Report	0 days	Fri 20/05/16	Fri 20/05/16
20		**System Development**	**22 days**	**Tue 24/05/16**	**Wed 22/06/16**
21		Writing Code	11 days	Tue 24/05/16	Tue 7/06/16
22		Testing Codes	5 days	Wed 8/06/16	Tue 14/06/16
23		Writing User Manual	3 days	Wed 15/06/16	Fri 17/06/16
24		User Acceptance Testing	3 days	Mon 20/06/16	Wed 22/06/16
25		Tested Program & User Manual	0 days	Wed 22/06/16	Wed 22/06/16
26		**System Implementation**	**5 days**	**Thu 23/06/16**	**Wed 29/06/16**
27		System Installation	2 days	Thu 23/06/16	Fri 24/06/16
28		User Training	2 days	Mon 27/06/16	Tue 28/06/16
29		System Handover	1 day	Wed 29/06/16	Wed 29/06/16
30		User Acceptance Report	0 days	Wed 29/06/16	Wed 29/06/16

5.3 Appendix C – ROI Grahp