Life Cycle Plan (LCP)

Mobil Application for Mobile-Controlled Lighting

Team 13

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Version History

Date	Author	Version	Changes made	Rationale
08/20/05	PP	1.0	Original template for use with LeanMBASE v1.0	Initial draft for use with LeanMBASE v1.0
08/30/06	SK, RT	1.6	• removed Section 4.1.4, 4.3 and 4.4 • added Table template	Duplicate with FRD and QMP
09/14/07	SK	1.9	Updated Section 3	Consistent with LeanMBASE 1.9
08/06/08	SK	2.0	• Removed Section 6.0 Appendix • Updated Section 1.1, 1.2, 2.3, 3.3	To comply with Instructional ICM-Sw standard
08/13/09	SK	2.1	• Embedded description in each Table • Removed Section 2.2 Phases • Revised Section 3.2 Responsibilities by Phase • Removed Table of Authorized Stakeholder Representatives • Removed 4.1.3 Project plan	• To be consistent with ICM EPG template set standard V2.1 • To leanify the life cycle plan
07/30/12	TK	2.2	• Updated Section 3.2, 5 • Added Section 6	To comply with Instructional ICSM-Sw standard
09/28/14	SS	3.0	• Added Risk Assessment section 3.3	• Valuation Commitment Package Draft
11/18/14	SS	3.1	• Updated section 1-6.1	• Development commitment package.
11/30/14	SS	3.2	• Added section 6.2, 6.3	• TRR Package
12/07/14	SS	3.3	• Corrected version and footer	• Final review of documents

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1. Introduction

1.1 Purpose of the LCP

LCP is used for following main purposes:

1. Requirements stability: This document will help in stabilizing the requirements collected from the client and thus help in the further stages of development
2. Deliver the product on-schedule and in acceptable condition so that it can be used by the desired users which is the main goal of the project (to put the idea into implementation)

1.2 Status of the LCP

"The status of the LCP is currently at the Operation Commitment Package version number 1.0. This is the version that will be delivered to the client. The major changes from Rebaselined Foundations phase are:

- Load balancing feature has been deferred for now.
- There is one more requirement stated regarding direct contact to Wifi without calling gateway whenever user is in home network. This requirement is also deferred for now.

Features that we are implementing:

- Design new screens as per shown in the prototype
- Revise existing android application
- Modify the existing database schema

1.3 Assumptions

- The duration of the project is 12 weeks, which are 12 weeks in Fall 2014.
- The team has the desired technical knowledge for implementing the project as per the requirements

2. Milestones and Products

2.1 Overall Strategy

"The 'Mobile Application for mobile-controlled lighting' project is following Architected Agile process because there is no Non-Development Item or Web service that would fit to most of the core capabilities.

"Exploration phase

Duration: 08/24/14- 9/21/14

Concept: They identify project operational concept, system and software requirement, system and software architecture, and life-cycle plan. These phases prioritize the capabilities, conduct investment and feasibility analysis, and implement the software prototype.

Deliverables: Valuation Commitment Package

Milestone: Valuation Commitment Review

Strategy: One Incremental Commitment Cycle"

Valuation phase

Duration: 09/21/14- 10/02/14

Concept: In this phase, the team had two win-win negotiation sessions to identify the win conditions, analyze the detailed requirements, evaluate the risks and prioritize the requirements. After the needs of the clients were clarified and confirmed, certain requirements with comparatively high risks were chosen to be prototyped, in order to control the risks. The prototype included basic UI design and a simple functional real device demo.

Deliverables: Draft Foundations Commitment Package, Project Effort Reports, Progress Reports, Prototype Report, System and Software Architecture Description

Milestone: Architecture Review Boards Foundations Commitment Review

Strategy: Incremental Commitment Cycles for Architected Agile, Meetings, Prototypes

Foundations phase

Duration: 10/02/14- 10/20/14

Concept: In this phase, the team will assess the project status. The changes in requirements will be analyzed, and corresponding adjustments will be made. NDI components will be assessed and development software architecture will be designed. Besides, actual functional prototypes will be built.

Deliverables: Development Commitment Package

Milestone: Development Commitment Review

Strategy: Incremental Commitment Cycles for Architected Agile, Meetings, Prototypes

Development phase – Construction Iteration

Duration: 10/20/14- 11/30/14

Concept: In this phase, a detailed project plan is created. Architectural design of the system will be used to guide the development process. Development team will implement the system based on the previous prototype. Regular meetings will be held to assess the current risks. Test team will test the current project and core capability drive-through will be performed at the end of this phase.
Deliverables: Transition Readiness Review Package
Milestone: Transition Readiness Review
Strategy: Incremental Commitment Cycles for Architected Agile, Development, Tests, Integrations

Development phase – Transition Iteration

Duration: 12/1/13- 12/10/13
Concept: By this phase, the complete and developed system should be ready. Training will be provided. Development team will provide a training plan, and document a detailed user manual. And the functioning software system will be transitioned.
Deliverables: Operational Commitment Review Package
Milestone: Operational Commitment Review
Strategy: Incremental Commitment Cycles for Architected Agile, Transition, Training

2.2 Project Deliverables

2.2.1 Exploration Phase

Deliverables in Exploration phase are:

Table 1: Artifacts Deliverables in Exploration Phase

Artifact	Due date	Format	Medium
Client Interaction Report	09/20/2014	.doc, .pdf	Soft copy
Valuation Commitment Package: • Operational Concept Description (OCD) Early Section • Life Cycle Plan (LCP) Early Section • Feasibility Evidence Description (FED) Early Section	09/27/2014	.doc, .pdf	Soft copy
Bugzilla report	Every Monday	.xls	Bugzilla Website
Project Plan	Every Wednesday	Text	MS Project Plan
Progress Report	Every Wednesday	.mpp, .pdf	Soft copy
Client Interaction Report	09/20/2014	.xls	Soft copy

Program Model	9/21/2014	.pdf	Soft-copy
Result Chain	9/21/2014	.pdf	Soft-copy
Business process model	9/21/2014	.pdf	Soft-copy

2.2.2 Valuation Phase

Table 2: Artifact deliverable in Valuation Phase

Artifact	Due date	Format	Medium
Draft Foundations Commitment Package: • Operational Concept Description (OCD) • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • System and Software Architecture Description (SSAD) • Prototype report (PRO)	10/02/2013	.doc, .pdf	Soft copy
Evaluation of Draft Foundations Commitment Package	10/02/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Response to Evaluation of Draft Foundations Commitment Package	10/02/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Foundations Commitment Package: • Operational Concept Description (OCD) • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • System and Software Architecture Description (SSAD) • Prototype report (PRO) • System and Software Requirements Definition	10/02/2013	.doc, .pdf	Soft copy
Evaluation of Foundations Commitment Package	10/02/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Response to Evaluation of Foundations Commitment Package	10/02/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Bugzilla report	Every Wednesday	Text	Bugzilla Website
Project Plan	Every Wednesday	.mpp	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy

2.2.3 Foundation Phase

Table 3: Artifact deliverable in Foundations Phase

Artifact	Due date	Format	Medium
Development Commitment Package: • Operational Concept Description (OCD) • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • System and Software Architecture Description (SSAD) • Prototype report (PRO) • Quality Management Plan (QMP) • Test Plan (TP) • Iteration Plan (IP)	10/16/2013	.doc, .pdf	Soft copy
Evaluation of Development Commitment Package	10/17/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Response to Evaluation of Development Commitment Package	10/17/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Bugzilla report	Every Wednesday	Text	Bugzilla Website
Project Plan	Every Wednesday	.mpp	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy

2.2.4 Development Phase

Table 4: Artifact deliverable in Development Phase

Artifact	Due date	Format	Medium
Draft Transition Readiness Package: • Operational Concept Description (OCD) • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • System and Software Architecture Description (SSAD) • Prototype report (PRO) • Quality Management Plan (QMP) • Test Plan (TP) • Iteration Plan (IP) • Iteration Assessment Report (IAR) • User manual (UM) • Training Material (TM)	TBD	.doc, .pdf	Soft copy
Transition Readiness Package: • Operational Concept Description (OCD) • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • System and Software Architecture Description (SSAD) • Prototype report (PRO) • Quality Management Plan (QMP) • Test Plan (TP) • Iteration Plan (IP) • Iteration Assessment Report (IAR) • User manual (UM) • Training Material (TM)	TBD	.doc, .pdf	Soft copy
Bugzilla report	Every Wednesday	Text	Bugzilla Website
Project Plan	Every Wednesday	.mpp	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy

3. Responsibilities

3.1 Project-specific stakeholder's responsibilities

Typical stakeholders of CSCI577a are as follows:

1. AdvanChip:
   Responsibilities:
   a. They are responsible for marketing the end-product that is to be delivered
   b. To make the product that is built-up usable. So, accordingly they are responsible for targeting the customers for which the product is being designed and accordingly design marketing strategies.

2. Developer
   Responsibilities:
   a. They are responsible for implementing the functionalities of the product as per the requirements after they are committed in the WinWin negotiation session.

3. Maintainer
   Responsibilities:
   a. Since the process used for product development is 'Agile process', the requirements keep on evolving. So, they are need to be embedded in our project and make it stable. So, the responsibility of the maintainer is to keep the requirements stable over the product evolution phase.

3.2 Responsibilities by Phase

Table 5: Stakeholder's Responsibilities in each phase

Team Member / Role	Primary / Secondary Responsibility				
	Exploration	**Valuation**	**Foundations**	**Development-** Construction Iteration	**Development-** Transition Iteration
Name: Advanchip Client	**Primary Responsibility** 1.Explain the current system 2. State the requirements **Secondary Responsibility**	**Primary Responsibility** Show the demo of the on-going existing project **Secondary Responsibility** Help us	**Primary Responsibility** - Provide feedback for prototypes	**Primary Responsibility** - Test system development modules - Provide feedback of system features	**Primary Responsibility** - Accept the training - Prepare for system transition

	1. Help us understand the current system, 2. Connect us with the previous team.	understand the system more better			
Name: Priyank Mishra Project Manager **Life cycle planner**	**Primary Responsibility** 1. Interact with the client 2. Manage the entire team **Secondary Responsibility** Help the team with the difficulties	**Primary Responsibility** 1. Interact with the client 2. Manage the entire team 3. Manage win-win negotiation sessions **Secondary Responsibility** Help the team with the difficulties	**Primary Responsibility** - Record Project progress - Create detailed project plan-Manage client interaction **Secondary Responsibility** - Create life cycle plan - Assess life cycle content - Create detail project plan	**Primary Responsibility** - Record Project progress - Modify detailed project plan - Develop system - Manage client interaction	**Primary Responsibility** - Manage client interaction - Deliver final project artifacts
Name: Sayali Sakhalkar **Feasibility Engineer** Software Architect	**Primary Responsibility** Formulate a flow of the system from various point of views after requirement collection stage **Secondary Responsibility** Identify the technologies to be used	**Primary Responsibility** Formulate the prototype of the system **Secondary Responsibility** Help the developers understand every component of the prototype formulated	**Primary Responsibility** - Define technology-independent architecture - Define technology-dependent architecture - Specify architecture styles, patterns and frameworks - Create system and software architecture description - Assess system architecture - Create UML Model	**Primary Responsibility** - Identify test plan and procedures - Test system **Secondary Responsibility** -NA	**Primary Responsibility** - Test system
Name: Saumil Kasbekar Feasibility Analyst Software Architect	**Primary Responsibility** Assess whether the project is feasible as per the client requirements in the given time frame **Secondary Responsibility**	**Primary Responsibility** Do feasibility analysis by using COINCOMO tool **Secondary Responsibility**	**Primary Responsibility** - Document feasibility evidence description - Assess feasibility evidence	**Primary Responsibility** - Identify test plan and procedures - Test system	**Primary Responsibility** - Test system

	Communicate with the client to discuss regarding feasibility of the project	Communicate with the client to discuss regarding feasibility of the project			
Name: Anuradha Saini Life Cycle Planner **Requirement Engineer**	**Primary Responsibility** **Secondary Responsibility** Help the team with the difficulties	**Primary Responsibility** 1. Interact with the client 2. Manage the entire team **Secondary Responsibility** Help the team with the difficulties	**Primary Responsibility** - Create life cycle plan - Assess life cycle content - Create detail project plan **Secondary Responsibility** - Identify system and software requirements definition	**Primary Responsibility** - Assess system architecture and monitor alignment of system development with system architecture **Secondary Responsibility** - Develop system	**Primary Responsibility** - Develop system - Fix defects
Name: Sagar Sarda Requirements Engineer **Life Cycle Planner**	**Primary Responsibility** 1. Interact with the client to collect requirements **Secondary Responsibility** Understand the requirements, fill up the winbook	**Primary Responsibility** 1. Interact with the client to collect requirements **Secondary Responsibility** Understand the requirements, fill up the winbook	**Primary Responsibility** - Identify system and software requirements definition **Secondary Responsibility** - Create life cycle plan - Assess life cycle content - Create detail project plan	**Primary Responsibility** - Develop system **Secondary Responsibility** - Assess system architecture and monitor alignment of system development with system architecture	**Primary Responsibility** - Develop system - Fix defects
Name: Ashutosh Kale **Operational Concept Engineer** Prototyper	**Primary Responsibility** Formulate a flow of the system from various point of views after requirement collection stage **Secondary Responsibility** Identify the technologies to be used	**Primary Responsibility** Formulate the prototype of the system **Secondary Responsibility** Help the developers understand every component of the prototype formulated	**Primary Responsibility** - Analyze and prioritize capabilities to prototype - Develop Prototype - Access prototype and components - Fix defects **Secondary Responsibility** - Create operational concept description	**Primary Responsibility** - Develop system **Secondary Responsibility** -Test modules during development and record test case results - Ensure module code modifications are done based on test case results	**Primary Responsibility** - Develop system - Fix defects

			- Assess operational concept		
Name: Corey Stall Requirements Engineer/ Shaper	**Primary Responsibility** 1. Interact with the client to collect requirements **Secondary Responsibility** Understand the requirements	**Primary Responsibility** 1. Interact with the client to collect requirements **Secondary Responsibility** Understand the requirements	**Primary Responsibility** - Identify system and software requirements definition	**Primary Responsibility** - Develop system	**Primary Responsibility** - Develop system - Fix defects

3.3 Skills

Team members	Role	Skills
Saumil Kasbekar	• Feasibility Analyst • Backend Developer • iOS Developer	Languages known: Java, SQL Required Skills: Node.js, MongoDB, MQTT, Objective-C/ Swift
Sayali Sakhalkar	• Software Architect • Quality Assurance • Backend Developer	Languages known: Java, SQL Required Skills: Node.js, MongoDB, MQTT
Anuradha Saini	• Life Cycle Planner • Quality Assurance • Front-end Developer	Languages known: Java, SQL Required Skills: Node.js, MQTT
Priyank Mishra	• Project Manager • Android Developer	Languages known: Java, noSQL Required Skills: Node.js
Sagar Sarda	• Requirements Engineer • Front-end/ Android Developer	Languages known: Java, SQL. Required Skills: Node.js, MQTT
Ashutosh Kale	• Prototyper • iOS Developer • Server Developer	Languages known: Java, SQL Required Skills: Node.js, Objective-C/Swift, MQTT
Corey Stall	• Requirements Engineer/Shaper • Quality Assurance	Skills: Requirement Gathering, Communications, Client interaction

		Required Skill: QA, Bugzilla, Winbook, Interpersonal skills

4. Approach

4.1 Monitoring and Control

We monitor and control our project in the following manner:

1. Conduct weekly meetings with the client to ensure that the implementation of the project is in synchronization with the requirements stated by the client
2. Prepare weekly progress reports, project plan that will help to integrate and maintain the system built up in long run

4.1.1 Closed Loop Feedback Control

By conducting weekly meetings, every team member gets as well as gives feedback to each other.

4.1.2 Reviews

1. Peer reviews:
   This is done in the development phase. This helped us to analyze code defects if any.

4.2 Methods, Tools and Facilities

Tools	Usage	Provider
Winbook	1. Used for collecting the requirements stated by the client and accordingly prioritizing them so that the client can have a clear view of the system from the development point of view 2. This tool basically helps in conducting negotiation sessions based on feasibility, time frame in which the project is to be completed, etc	Course Website
COINCOMO	This helps in estimating whether the project is feasible or no.	Course Website
Bugzilla	This tool basically records all the defects identified in the system so that they can be resolved by the developers in the upcoming phase	Course Website
Eclipse	IDE for Android app development	Open Source
Notepad++	Server development	Open Source
WINSCP	File Transfer on server	Open Source

GeneMotion	Android emulator	GeneMotion
Putty	Server debugging	Open Source
Papertrail	Server logs	Papertrail
MS Project planner	Planning project	Microsoft
MS visio	Flowcharts and diagrams	Microsoft

5. Resources

Identify the following information in order to estimate the software cost:

- Estimated CSCI577a Effort : 7 team members at 20 hrs/week for 12 weeks
- Total estimated effort : 100%
- Budget information : Maximum budget is $500
- Project duration : 3.5 months since all members taking only CSCI 577A course
- Component modules in your development project :
- Programming language : Java

Table 6: COCOMOII Scale Driver

Scale Driver	Value	Rationale
FLEX	NOM	System built up is quite flexible in terms of incorporating new requirements during software development life cycle
TEAM	HIGH	All tasks are done collaboratively by team members, co-operative interaction exists among team members
RESL	LO	Process development is agile, hence with the evolving requirements in the system, risk resolution is done at every stage of project life cycle
PMAT	NOM	Project started well in time
PREC	NOM	Since the requirements were appropriately understood with the help of client interaction

Table 7: COCOMOII Cost Driver

Cost Driver	Value	Rationale
RELY	NOM	Time given for the software development is not enough to completely implement the system
DATA	LOW	Information to be stored is not much
CPLX	LOW	Team members are quite experienced in the required technologies
RUSE	LOW	No proper documentation available from the previous team
DOCU	LOW	Not applicable
TIME	NOM	Team members are quite experienced in the required technologies
STOR	NOM	data to be stored is not much
PVOL	LO	Technologies have already been finalized in prototype
ACAP	VHIGH	Team members are quite experienced in the required technologies
PCAP	VHIGH	Team members are quite experienced in the required

		technologies
APEX	HIGH	Team members are quite experienced in the required technologies
PLEX	NOM	Team members are quite experienced in the required technologies
LTEX	HIGH	Team members are quite experienced in the required technologies
PCON	VLOW	No team member is continuing for 577b
TOOL	HIGH	Team is quite experienced with the software being used
SITE	VHIGH	Collaborative work by team members
SCED	NOM	Project is being managed quite well

Figure 1: COINCOMO model estimation of the product

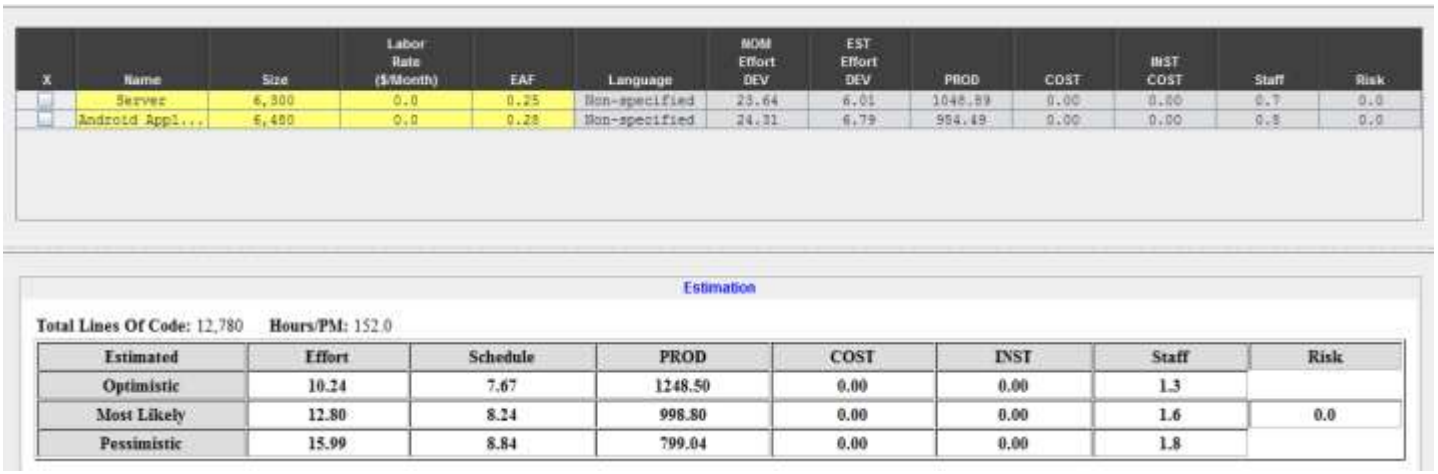

Table 8: Application Count: Screens

Screen	Number of views	Number of source of data tables	Complexity level	Rationale
Login Screen	1	1	1	Authentication
Add User	1	1	1	Adding new user to the database
Menu Screen	1	1	1	To display options to the admin
Add Gateway	1	1	1	To add more gateways
Add Favorite Screen	1	2	2	To add some switches as favorites
Add switch	1	1	1	To add new switch
Configure Gateway	1	1	1	To configure gateway with the help of Wifi

Account Settings	1	1	1	Provide options to user to change username and password
Forgot Password	1	2	2	To reset password
Delete User	1	2	2	To delete user
Delete Switch	1	1	1	To delete switch
Delete Gateway	1	1	1	To delete gateway
All Switch ON	1	2	2	To switch all ON
All Switch OFF	1	2	2	To switch all OFF

Table 9: Application Count: Reports

Report	Number of sections	Number of source of data tables	Complexity level	Rationale
< Report name >	<value>	<value>	<value>	<comments>
…				

Table 10: Application Count: 3GL components

Component	Rationale
Android Application	Provide an interface to the user to interact with the system
Hardware	For the hardware to work, gateway configure is important
Database	For authentication purpose, database access is required
Server	Process request from users

Table 11: Application Point Parameters

Parameter	Value	Rationale
Knowledge of required technical tools like Android, tools to be used like Winbook, Bugzilla, etc	5	In order to implement the mobile application project, knowledge of technologies like android, SQLite database and some other tools is required

6. Iteration Plan

6.1 Plan

Project plan is a course-grained plan and there is only one per development project. It captures the overall scope of the project, for one cycle. Life cycle milestones that will be addressed are as follows:

- Lifecycle Objective milestone: The objective of the project is already well-known. The main intention behind doing the project is to make buildings switch-free.
- Lifecycle Architecture milestone: The architecture of the project to be implemented is complete and the requirement are set with the help of Winbook tool.
- Initial Operational Capability milestone: This phase marks the first release. This project is a one-semester project, so the first deliverable is expected in first week of November.
- Product Release milestone: This is done at the end of Transition and development cycle. So, this phase is expected around end of month November.
- Resources required over time: Proper hardware, more time, training on the required technologies which the team members are unaware about

6.1.1 Capabilities to be implemented

<< For the milestone identified above, identify the capabilities that will be implemented in the upcoming iteration. Identify the features, requirements or use–cases that are being developed (implemented, tested, etc.) for this iteration. Each component should be accounted for in at least one iteration. All requirements should be implemented and tested (or re-negotiated) by the completion of all the iterations. Be mindful of implementation dependencies. Document complex dependencies and communicate them to the appropriate development staff. >>

Table 12: Construction iteration capabilities to be implemented

ID	Capability	Description	Priority	Iteration
1	Proper Hardware	Proper hardware configuration is required so that the gateway is configured without any delay and more reliably.	2	1
2	Technology Training	Few technologies that are to be used to implement the project are not known to the project team members	1	1
3	Good Prototype design	UI Prototype has been designed. Building prototype will help to identify defects if any and thus ensure the robustness of the application built	3	1
4	Performance	The application should not crash. So, care has to be taken for it.	4	1

6.1.2 Capabilities to be tested

Table 13: Construction iteration capabilities to be tested

ID	Capability	Description	Priority	Iteration
1	Hardware Configuration	Multiple hardware kits are provided. So, hardware configuration debugging is done with the help of papertrail software.	2	1
2	Prototype	This will help ensure the reliability of the	1	1

		system. So, testing the prototype is quite important.		
3	Peer Review	The technical tools required for implementing the project are not known by all members of the team. So, training is required for it. Further, this capability can be tested by conducting peer reviews.	3	1

6.1.3 Capabilities not to be tested

1. Performance - This is important for testing purpose. But due to the time – constraint in which it is to be completed, it will be difficult to ensure the performance of the system.

6.1.4 CCD Preparation Plans

<< Identify the clients and other users who will be involved in the Core Capability Drive-through, the usage scenarios that it will support, and the specific CCD preparation plans and milestones. These may include

- user context-setting
- site preparation dry runs,
- feedback forms, and
- CCD risk management plans. >>

Clients and other users involved are:

1. Client – It will be the client for which the software is being made. So, client is an important stakeholder in the phase of building the system.
2. Other users involved - The application is being made for old users for their ease and convenience and also for the enterprise users.

The plan may encompass the following:

1. Dry-run testing can be done. This will help to ensure proper workflow of the application
2. Feedback forms can be filled to ensure the usability of the system

Risk Management Plans:

1. For analyzing the risks, at an earlier stage, prototype is built that helps in analyzing the system more better.
2. Further, weekly client interaction helps in ensuring the consistency of the system built

6.2 Iteration Assessment

6.2.1 Capabilities Implemented, Tested, and Results

Table 14: Capabilities implemented, tested, and results

ID	Capability	Test Case	Test Results	If fail, why?
1	Users can successfully add floor	< TC - 05-01 >	Pass	< comments >
2	Users can successfully add room	<TC – 05 - 02>	Pass	
3	Users can successfully add gateway	<TC – 01-01>	Pass	
4	Users can successfully delete gateway	<TC – 01 - 02>	Pass	
5	Users can successfully add switch	<TC – 02 - 01>	Pass	
6	Users can successfully delete switch	<TC – 02 – 02>	Pass	
7	Users can successfully add favorite switch	<TC – 03 – 01>	Pass	
8	Users can turn all ON and all OFF	<TC – 04 - 01 >	Pass	

6.2.2 Core Capabilities Drive-Through Results

- Positive feedbacks
  1. Project was done very professionally
  2. Robust application built

- Improvements needed/suggested

  1. Some suggestions given over navigating the application
  2. GUI of the application
  3. User manual suggestions

- Changes to-be considered (Reprioritized capabilities, requirements, GUI, etc.)
  1. Improved GUI of application
  2. Easy user interface in terms of navigating the application

- Risks (New risks introduced, risks mitigated, etc.)
  1. New risk introduced:
     a. A new requirement of using MQTT instead of HTTP was raised in the last moment. So, it raised certain risk of application getting completed
     b. Hardware Failure

2. Risks mitigated:
   a. Mitigated the risk of MQTT by not replacing it with HTTP directly in the current working application. Instead, adding it into separate standalone application.

6.3 Adherence to Plan

Team 13 has been following the iteration plan and completed all proposed capabilities on time except a feature requirement of MQTT added in the last moment which could not be completed due to lack of time.