

B.Tech. (Computer Sc. and Engineering)
(with Specialization in Software Development)
(Batch-2018)

Project#1: Life Cycle Models

Intern's Detail:

180028, Sajib Biswas

Date of Submission:

15-08-2020

Table of Contents		
Sr. No.	Title	Page No.
1	Introduction 1.1 Purpose 1.2 Scope 1.3 Definitions, Acronyms and Abbreviations	3
2	Intern's Detail 2.1 Role and Responsibilities 2.2 Insights & Confusions	3
3	PETS 3.1 Brief description of each tab 3.2 Relationships among tabs	4
4	Issues and items for improvements	6
5	Standard APIs / data structures used	6
6	Bibliography	6

1. INTRODUCTION

The aim is to develop a document that can describe the implementation of the project which has been done and recognized the problems. We need to mention the roles, responsibilities and confusions. Some of the new API need to learn. Among them table view, observable list is most required.

1.1 Purpose

The purpose of this project is to identify the questions and describe the work in the PET project. We need to analyze the code to understand the problems and its implementations and find out the answer how the code works.

1.2 Scope

We need to analyze the code and get the proper understanding about the code and how they work. We need to find the errors in the code and analyze them and find the answer how can we improve them. We also need to find the relationships between each tab.

1.3 Definitions, Acronyms, and Abbreviations

Life Cycle Model

The life cycle model is one of the key concepts of systems engineering (SE). A life cycle for a system generally consists of a series of stages regulated by a set of management decisions which confirm that the system is mature enough to leave one stage and enter another.

PETS -Process Enhancement Tool Suite

UI- User Interface

API- Application Programming Interface

2. INTERN'S DETAIL

2.1 Role & Responsibilities

- Download the code and compile it
- Read the code
- Analyse the code and know how the code works
- Understand the code and its problem
- Find the relationship between all tabs

- Find the issues
- Find the scope to improvement

2.2 Insights & Confusions

- Uses of this project
- Additional changes
- How to test the changes make?

3. PETS

3.1 Brief description of each tab

1. *Life Cycle*

This tab contains info about the Life Cycles. It has name and description and they are stored in a table. We can perform edit, save and add operations in the tab. Along with these, this tab has the following

- Text are for the name of life cycle
- Description text field
- Several buttons including create, save, edit, import, download, clear the names and definition above, upload, and remove.
- We can save the name of life cycle using the save button.

2. *Steps*

This tab is about the steps in the life cycle. It contains step name and description. It mentions the steps, pre-condition of the life cycle, tasks, post-conditions in the form of a table. We can edit, delete and add in this as well. Along with these the tab has the following:

- 3 combo boxes
- Button to save, edit and CRUD operation
- Text Field and Area
- Task name area and table to store the data.

3. *Tasks*

This tab is about the tasks which were mentioned in the previous tab i.e. Step. There is a table for the added tasks. The task contains name and description. There are two more items that are artifacts used and artifacts produced in the task. Along with these the tab has the following:

- Text field and text area for the description
- Combo box
- Table to store data and name
- CRUD and Up, Down buttons

4. *Conditions*

This tab is for the conditions. It has a table which stores the conditions. The condition contains name, description and state of it.

The tab has the following:

- Text area for long description
- Text field for cycle name
- Buttons including (CRUD, add up, add down, add bottom, clear button)

5. *Effort Categories*

This tab contains details about the efforts. It contains effort category name and description and is stored in the table with edit, add and save options. It also contains artifact options for effort categories. Along with these the tab has the following:

- Two combo boxes to add artifacts and storing category
- Table to store data of effort, artifact.
- Text area for long description
- Text field for cycle name
- Buttons including (CRUD, add up, add down, add bottom, clear button)

6. *Artifacts*

It contains details about the artifacts. It has name and description and is stored in table. We can edit, add and save the artifacts. The tab has text field and text area to store the name of the artifacts. It has 9 keys, editing, saving, adding, adding down, adding down, clearing the name and description above, moving up, moving Down and deleting.

7. *Plans*

This tab is about the plans. It has name and description and is stored in table. We can edit, add and save the plans and also clear it. The tab has a text field to enter the name of the artifact and one text area to enter descriptions.

8. *Interruptions*

This tab is about the interruptions. It has name and description and is stored in table. We can edit, add and save the plans and also clear the interruptions. The tab has one text field for artifact name and one text area. It also has table to store the interruption name.

9. *Defects*

This tab is about the Defects. It has name and description and is stored in table. We can edit, add and save the plans and also clear the Defects. The tab has 9 different buttons including Edit, Save, add up, add down, add bottom, Clear the above name, and description, Move Up, Move Down and delete.

3.2 Relationships among tabs

All the tabs are linked each other with their corresponding attributes. All the tabs have their text field, text area and buttons. All the things come in the table when the life cycle has been saved.

User can change the table using CRUD buttons and save them.

4. ISSUES AND ITEMS FOR IMPROVEMENTS

There are several places to improve. Among them there should be improvement in UI. Instead of them Text field, text area and buttons can be improved.

5. STANDARD APIs / DATA STRUCTURES USED

- Javafx
- Table View
- Java utilities

Data Structure Used

1. Observable list
2. Array

6. BIBLIOGRAPHY

https://www.sebokwiki.org/wiki/Life_Cycle_Models#:~:text=The%20life%20cycle%20model%20is,one%20stage%20and%20enter%20another.
<https://lms.mmumullana.org/course/view.php?id=77>