**Group Name: TiTechnics** 

# **Software Construction and Development**

Deliverable 03 & 04

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## **Development and Testing**

#### **Personal Finance Tracker**

## 1. GitHub Repository Link:

https://github.com/Aazeen99/Personal-Finance-Tracker.git

# 2. Refactoring Techniques

#### 1.1 Removing dead code

We removed excessive methods that were repetitive throughout the code.

### 2.2 Prevention of Long Class/Bloaters

We created number of different classes for each module to separate functionalities, hence improving readability.

## 2.3 Prevention of Lazy Class

We removed all the classes that were no longer functional.

#### 2.4 Avoiding Object Oriented Abusers

We mapped the code with package diagram, to properly implement principles of Object Oriented Paradigm.

#### 2.5 Using Proper Naming Convention

We used camel casing for the names of classes and methods.

### 2 Test Cases

Test So	cenario	Registration-1		Test Case I	D	Regist	tration-1A
Test C Descri		Registration - Positive	Test Priority		High		
Pre-Requisite  Test Execution Ste		NA eps:		Post-Requisite		User account created successfully	
	•	•					
S.No	Action	Inputs	Expected Output	Actual Output	Test Resu		est Comments
1	Launch application	-	Applicatio n Launched.	Applicati on	Pass	13	Khadija 5/05/2024 0:57 PM]:

			Launche		Launch
			d.		successful
Enter valid Username, Email, and Password and hit register button	Username: user123 Email: user123 @gmail.com Password: password123	Registratio n Successful.	Registrati on Successful	Pass	[Khadija 15/05/2024 10:57 PM]: Registration Successful.

<b>Test Scenario</b>	Registration-1	Test Case ID	Registration-1C
ID	3		3
Test Case	Registration - Negative test case	Test Priority	High
Description	(Invalid email format)		
Pre-Requisite	NA	Post-Requisite	NA
E . E			

Test Execution Steps:

S.No	Action	Inputs	Expected	Actual	Test	Test
			Output	Output	Result	Comments
1	Launch application	-	Applicatio n Launched.	Applicati on Launche d.	Pass	[Khadija 15/05/2024 10:57 PM]: Launch successful
2	Enter valid Username, invalid Email format, and Password and hit register button	Username: user123 Email: user123.com Password: password123	Invalid email format. Please enter a valid email.	Invalid email format. Please enter a valid email.	Pass	[Khadija 15/05/2024 10:57 PM]: Invalid email format.

Test Scenario ID	Login-2	Test Case ID	Login-2A
Test Case	Login – Positive test	<b>Test Priority</b>	High
Description	case		
Pre-Requisite	A valid user account	Post-Requisite	Login successful

Test Execution Steps:

S.No	Action	Inputs	Expected Output	Actual Output	Test Result	Test Comments
1.	Launch application	-	Application Launched.	Application Launched.	Pass	[Khadija 15/05/2024 10:57 PM]:

## Personal Finance Management

						Launch
						successful
2.	Enter	Username:	Login	Login	Pass	[Khadija
	correct	khadija1234	success	success		15/05/2024
	Username	Password:				10:57 PM]:
	&	1234				Login
	Password					successful
	and hit					
	login					
	button					

Test Scenario	Login-2	Test Case ID	Login-2B			
ID						
Test Case	Login – Negative test case	Test Priority	High			
Description						
Pre-Requisite	NA	Post-Requisite	NA			
Test Execution Steps:						

S.No	Action	Inputs	Expected	Actual	Test	Test
			Output	Output	Result	Comments
1	Launch application	-	Applicatio n Launched.	Applicati on Launche d.	Pass	[Khadija 15/05/2024 10:57 PM]: Launch successful
2	Enter invalid Username & any Password and hit login button	Username : invalid123 Password: 123	Incorrect username or password. Re-enter.	Incorrect username or password. Re-enter.	Pass	[Khadija 15/05/2024 10:57 PM]: Invalid login attempt stopped

	Test case scenario ID		Add bill reminder		Test case ID		Add bill reminder 1	
		Launchi case	· ·		<b>Test Priority</b>		Medium	
	equisite	NA		Post	-Requisite	Frame s	should be visible	
Test execution steps								
S.No	Action	Inputs	<b>Expected Output</b>		Actual Output	Test Result	Test Comments	
1	Launch application	-	Application Launched.		Application Launched.	Pass	[Alyan 16/05/2024 10:57 PM]: Launch successful	
2	Click on the "Add Bill Reminder" button	-	BillPaymentRemi frame should oper and billManagem frame should clos	n ent	BillPaymentReminder frame opens and billManagement frame closes.	Pass	[Alyan 16/05/2024 10:57 PM]: Add Bill Reminder button works as	

expected