

**Group Name: TiTechnics**

**Software Construction and Development**

**Deliverable 03 & 04**

18<sup>th</sup> May 2024

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## Development and Testing

### Personal Finance Tracker

## 1. Refactoring Techniques

### 1.1 Removing dead code

We removed excessive methods that were repetitive throughout the code.

### 1.2 Prevention of Long Class/Bloaters

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

### 1.3 Prevention of Lazy Class

We removed all the classes that were no longer functional.

### 1.4 Avoiding Object Oriented Abusers

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

### 1.5 Using Proper Naming Convention

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

## 2 Test Cases

Test Scenario ID		Registration-1		Test Case ID		Registration-1A	
Test Case Description		Registration - Positive test case		Test Priority		High	
Pre-Requisite		NA		Post-Requisite		User account created successfully	
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]: Launch successful	

2	Enter valid Username, Email, and Password and hit register button	Username: user123 Email: user123@gmail.com Password: password123	Registration Successful.	Registration Successful	Pass	[Khadija 15/05/2024 10:57 PM]: Registration Successful.
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Test Scenario ID		Registration-1		Test Case ID		Registration-1C	
Test Case Description		Registration - Negative test case (Invalid email format)		Test Priority		High	
Pre-Requisite		NA		Post-Requisite		NA	
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]: 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 Description		Login – Positive test case		Test Priority		High	
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]: Launch successful	

## Personal Finance Management

2.	Enter correct Username & Password and hit login button	Username: khadija1234 Password: 1234	Login success	Login success	Pass	[Khadija 15/05/2024 10:57 PM]: Login successful
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Test Scenario ID		Login-2		Test Case ID		Login-2B	
Test Case Description		Login – Negative test case		Test Priority		High	
Pre-Requisite		NA		Post-Requisite		NA	
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]: 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	