

**Unit Test Plan Template**

Project Name:  
Project Sponsor:  
Service Owner:  
Project Manager:  
Document Date:

**1. Unit Test Plan Scope (In Scope – Out of Scope)**

In Scope	Out of Scope
Validator.isEmailValid() ArrayHelper.countUniqueElements() CryptoHelper.encryptText()	ReverseString() MathHelper()

**2. Unit Test Cases**

ID	Test Cases	Input Value	Expected Output
1.1	Method isEmailValid() in class Validator with valid email	"test@example.com"	true
1.2	Method isEmailValid() in class Validator with invalid email	"test@com"	false
1.3	Method isEmailValid() in class Validator with empty string	""	false
2.1	Method countUniqueElements() in class ArrayHelper with unique elements	[1, 2, 3, 4, 5]	5
2.2	Method countUniqueElements() in class ArrayHelper with duplicates	[1, 2, 2, 3, 4, 4, 5]	5
2.3	Method countUniqueElements() in class ArrayHelper with empty array	[]	0
3.1	Method encryptText() in class CryptoHelper with valid input and key	"hello", 3	"khoor"
3.2	Method encryptText() in class CryptoHelper with empty text	"", 3	""
3.3	Method encryptText() in class CryptoHelper with negative key	"abc", -1	"zab"

**3. Unit Test Results**

ID	Test Cases	Pass/Fail	Actual Output	Tested By	Date Tested
1.1	Method isEmailValid() pada class Validator dengan data valid	Pass	True	Rakha Maulana	13/11/2024
1.2	Method isEmailValid() pada class Validator dengan data invalid	Pass	False	Rakha Maulana	13/11/2024
1.3	Method isEmailValid() pada class Validator dengan data kosong	Pass	False	Rakha Maulana	13/11/2024
2.1	Method countUniqueElements() pada class ArrayHelper dengan data unik	Pass	5	Rakha Maulana	13/11/2024

### Unit Test Plan Template

Project Name:

Project Sponsor:

Service Owner:

Project Manager:

Document Date:

2.2	Method countUniqueElements() pada class ArrayHelper dengan data duplikat	Pass	5	Rakha Maulana	13/11/2024
2.3	Method countUniqueElements() pada class ArrayHelper dengan data kosong	Pass	0	Rakha Maulana	13/11/2024
3.1	Method encryptText() pada class CryptoHelper dengan input valid	Pass	"khood"	Rakha Maulana	13/11/2024
3.2	Method encryptText() pada class CryptoHelper dengan teks kosong	Pass	""	Rakha Maulana	13/11/2024
3.3	Method encryptText() pada class CryptoHelper dengan kunci negatif	Pass	"zab"	Rakha Maulana	13/11/2024

## 4. Addendums & Appendices

*Include any additional documents.*

Application under test link

<https://github.com/RakhaMaulana/phpunittest-KPL->