Learning Report – Applied SDLC and Software Testing

GLOBAL ENGINEERING ACADEMY

GENSIS

L&T Technology Services

Document History

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NUMBER ANALYZER

INTRODUCTION

This is an application which checks for various properties of a number. When a number is given, the application checks whether the number is Prime, Armstrong, Odd/Even, Palindrome and Power.

REQUIREMENTS

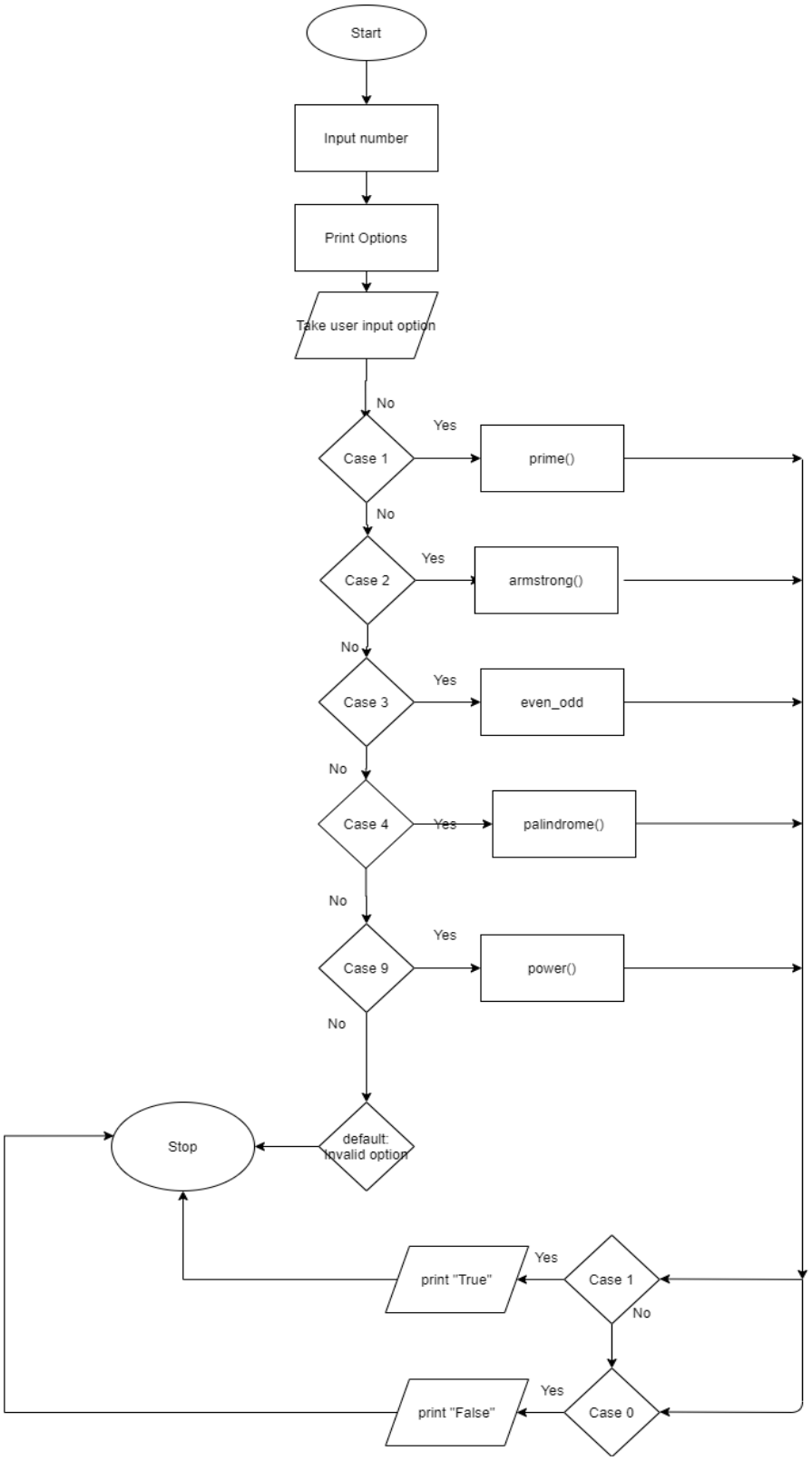
HIGH LEVEL REQUIREMENTS

ID	DESCRIPTION
HL_01	Check for different properties of the number
HL_02	Determine the divisibility
HL_03	Perform different operations

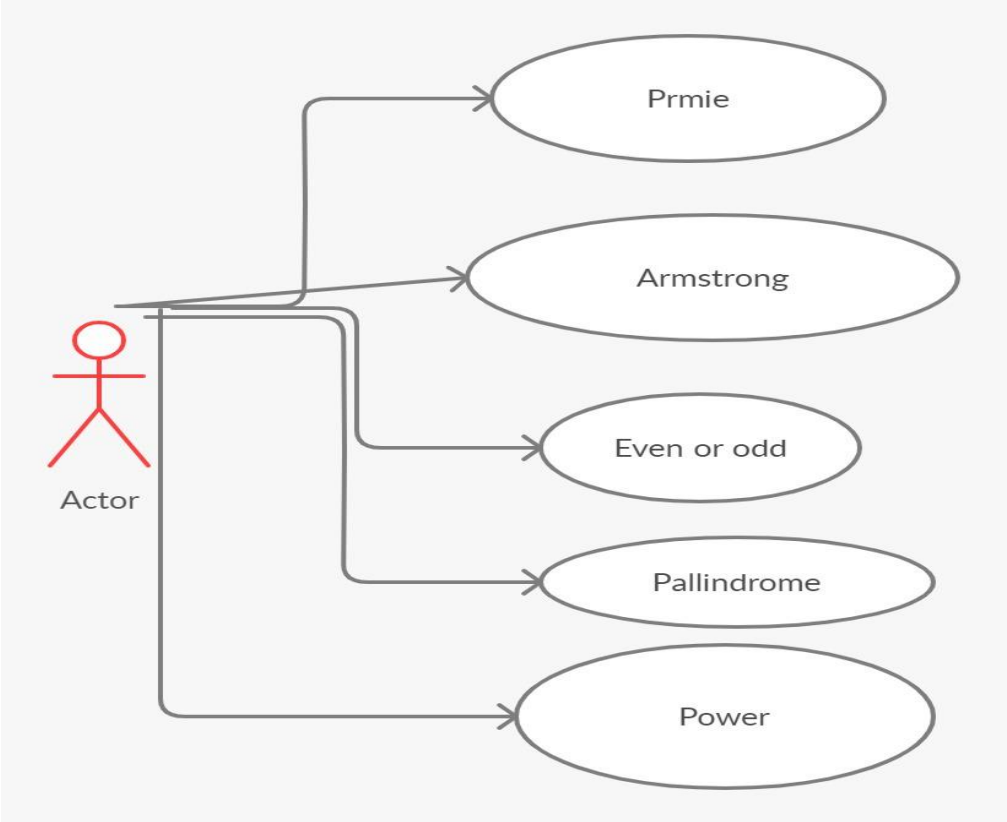
LOW LEVEL REQUIREMENTS

ID	DESCRIPTION
HL_01_LL_01	Determine whether the given number is prime
HL_01_LL_02	Determine whether the given number is Armstrong
HL_01_LL_03	Determine whether the given number is Odd or Even
HL_01_LL_04	Determine whether the given number is a Palindrome
HL_01_LL_05	Determine whether the given number is a power of 2

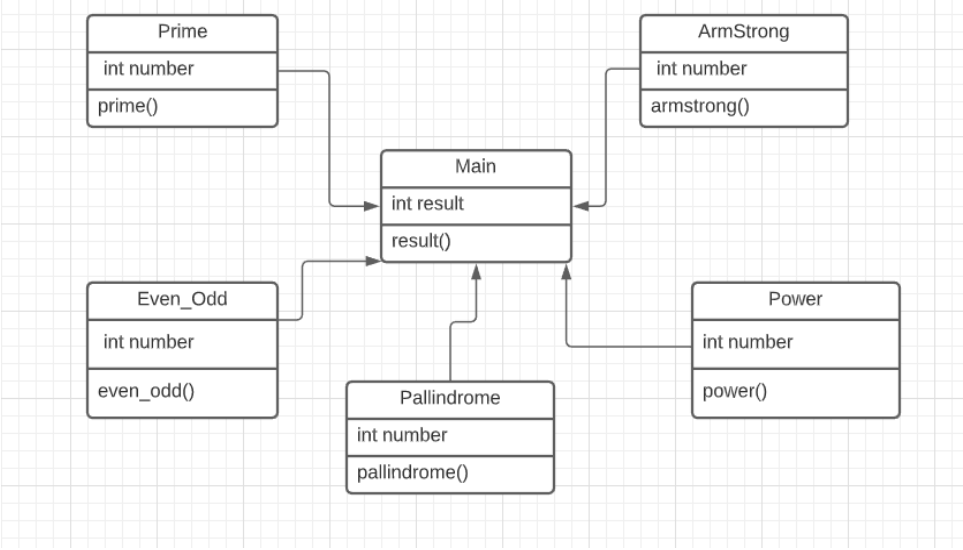
1. UML Diagram



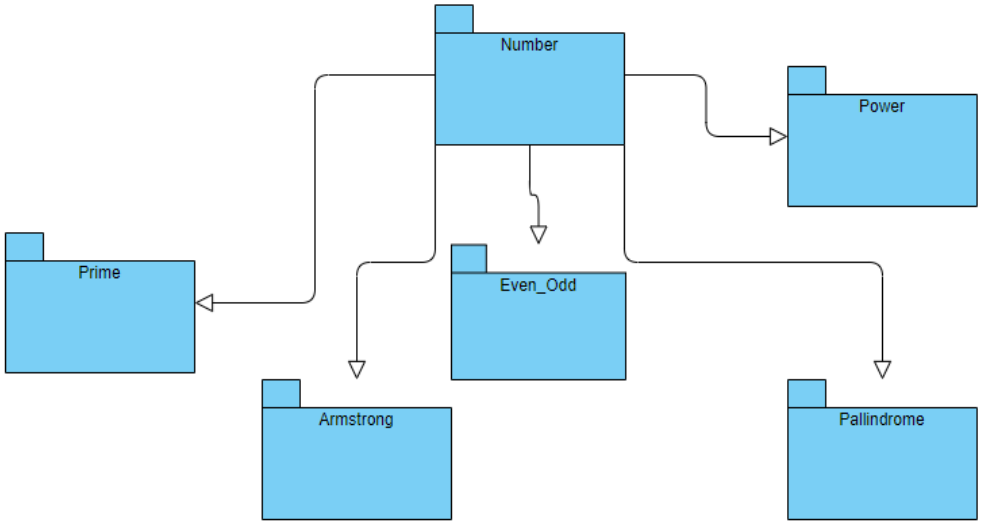
2. Use case Diagram



3. Class Diagram



4. PACKAGE DIAGRAM



TEST PLAN

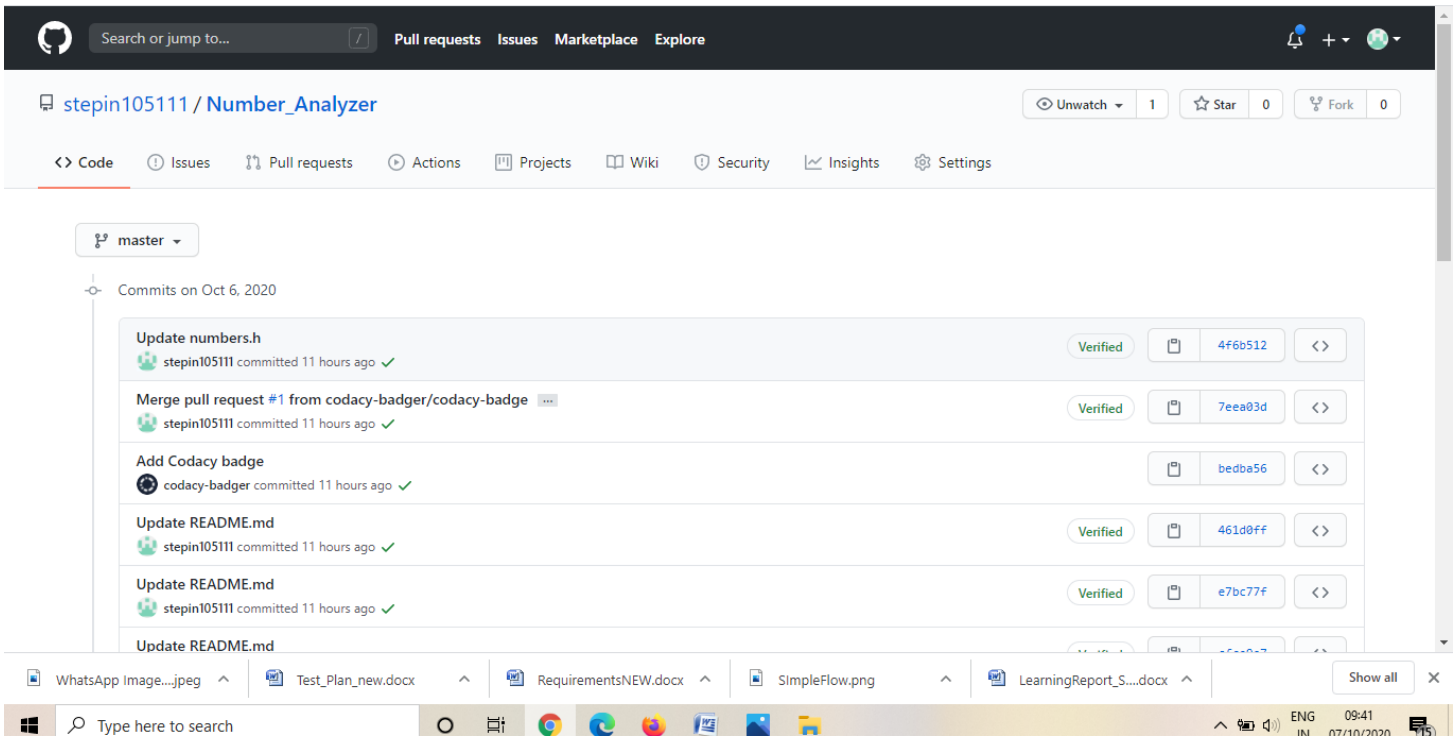
ID	DESCRIPTION	PRE-CONDITION	EXPECTED INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT
HL_01_IT_01	Test Different properties of the given number	The number must be positive	Any Number	PASS/FAIL	
HL_01_LL_01_UT_01	Testing with a prime number	The number must be positive	1	The number is prime	
HL_01_LL_01_UT_02	Testing with a non- prime number	The number must be positive	48	The number is not prime	
HL_01_LL_02_UT_01	Testing with an Armstrong number	The number must be positive	153	The number is Armstrong	
HL_01_LL_02_UT_02	Testing with non-Armstrong number	The number must be positive	15	The number is not Armstrong	
HL_01_LL_03_UT_01	Testing with an even number	The number must be positive	2	The number is Even	
HL_01_LL_03_UT_02	Testing with an odd number	The number must be positive	5	The number is Odd	
HL_01_LL_04_UT_01	Testing with a palindrome number	The number must be positive	1551	The number is Palindrome	

HL_01_LL_04_UT_02	Testing with a number which is not a palindrome	The number must be positive	15	The number is not Palindrome	
HL_01_LL_05_UT_01	Testing with a number which is a power of 2	The number must be positive	4	The number is a power of 2	
HL_01_LL_05_UT_02	Testing with a number which is not a power of 2	The number must be positive	5	The number is not a power of 2	

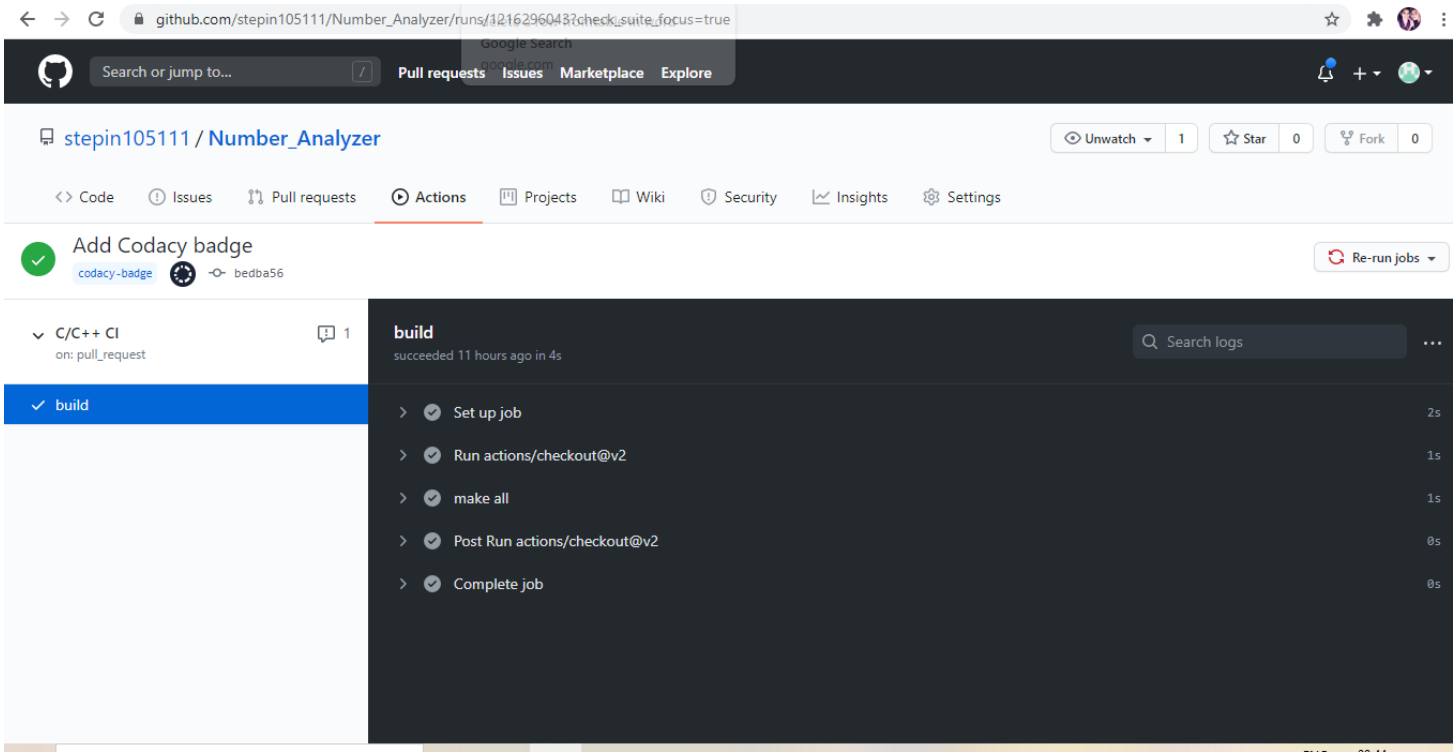
CI WORKFLOWING

Git Hub Link: https://github.com/stepin105111/ Number_Analyzer.git

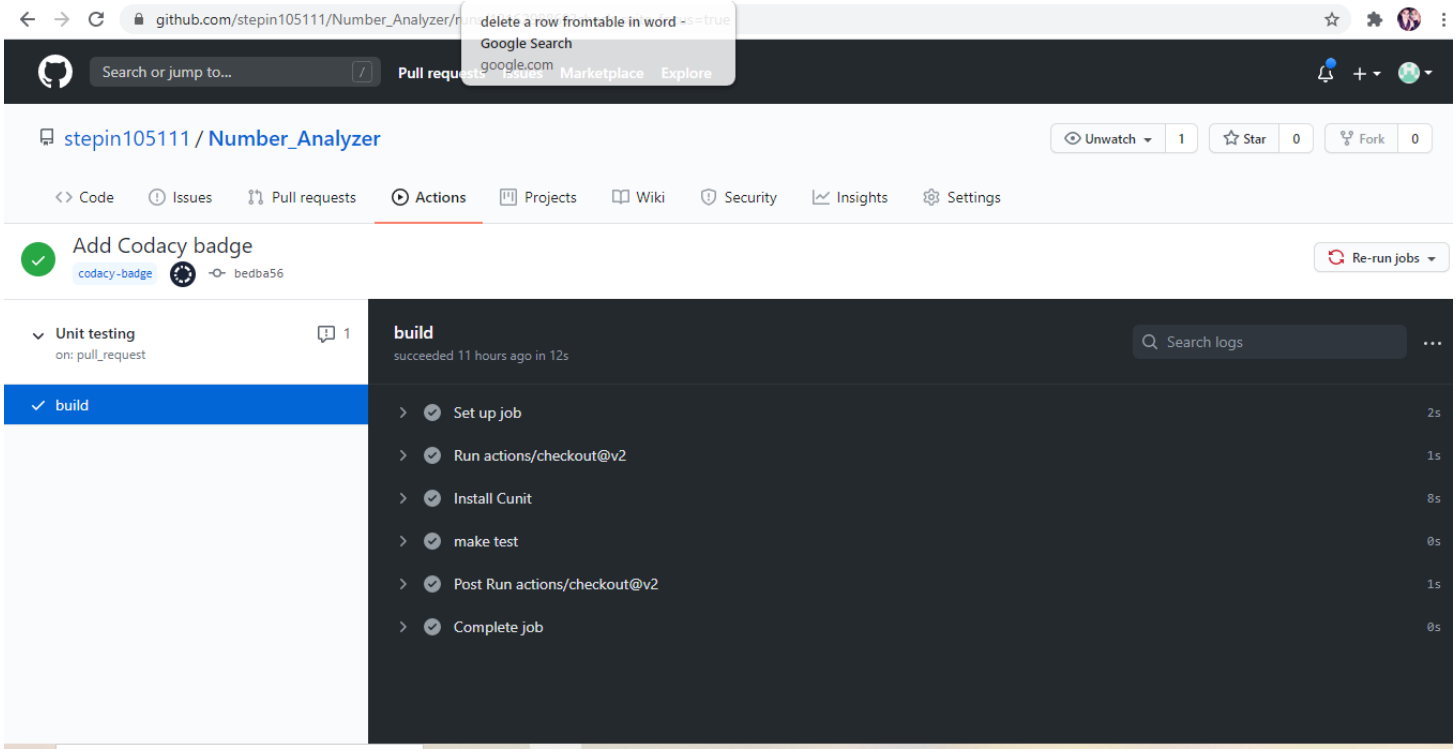
CODE COMMITS



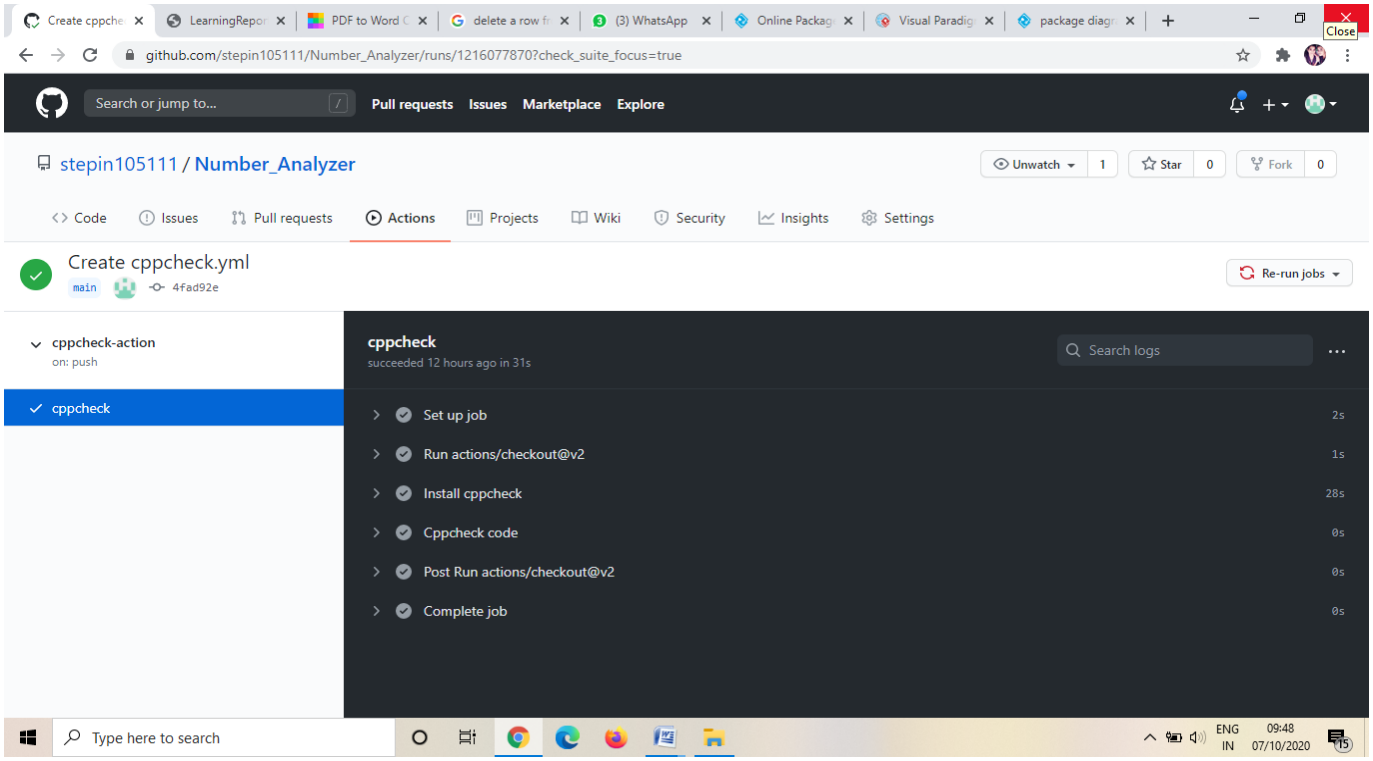
BUILD



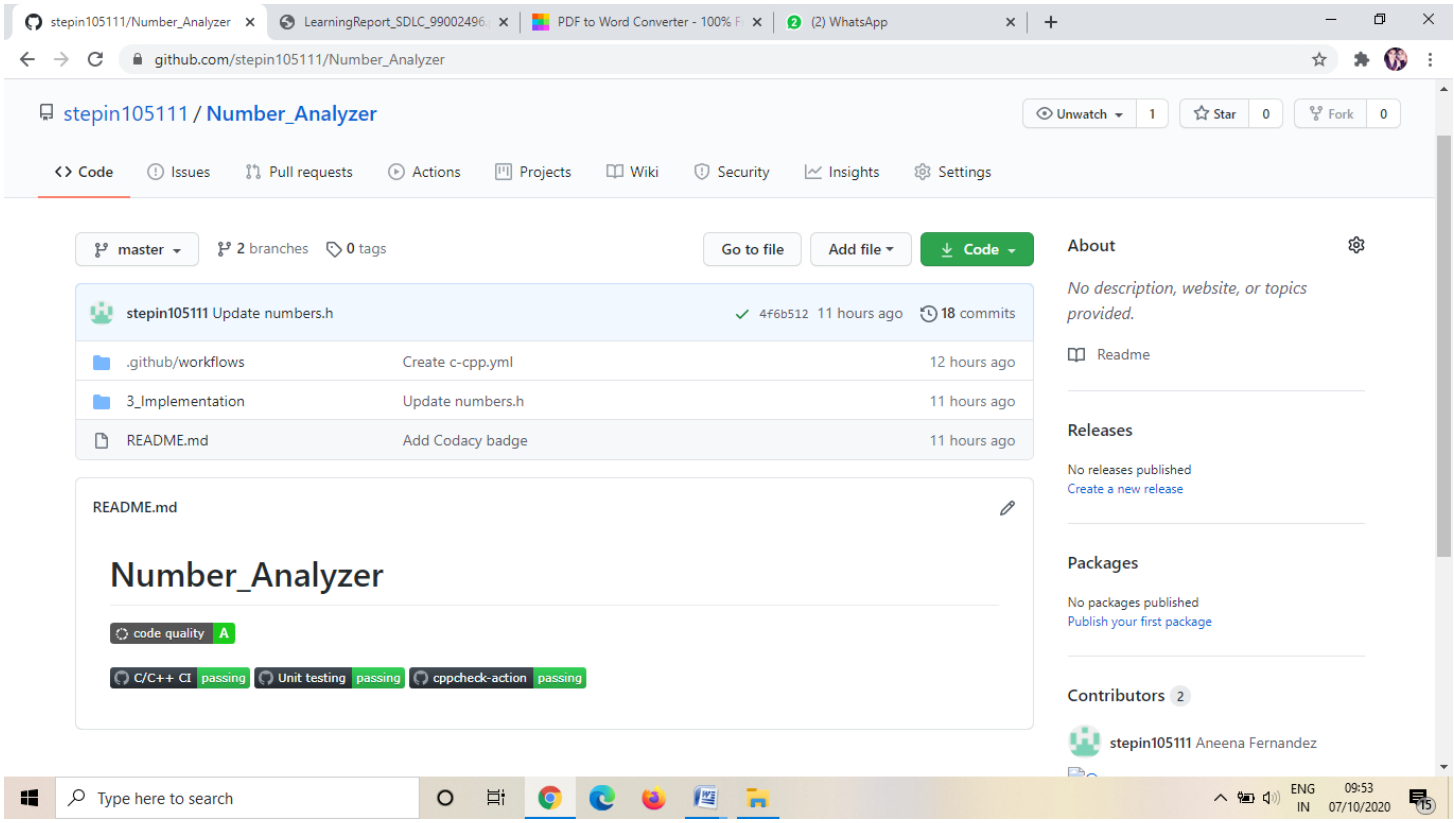
UNIT TESTING



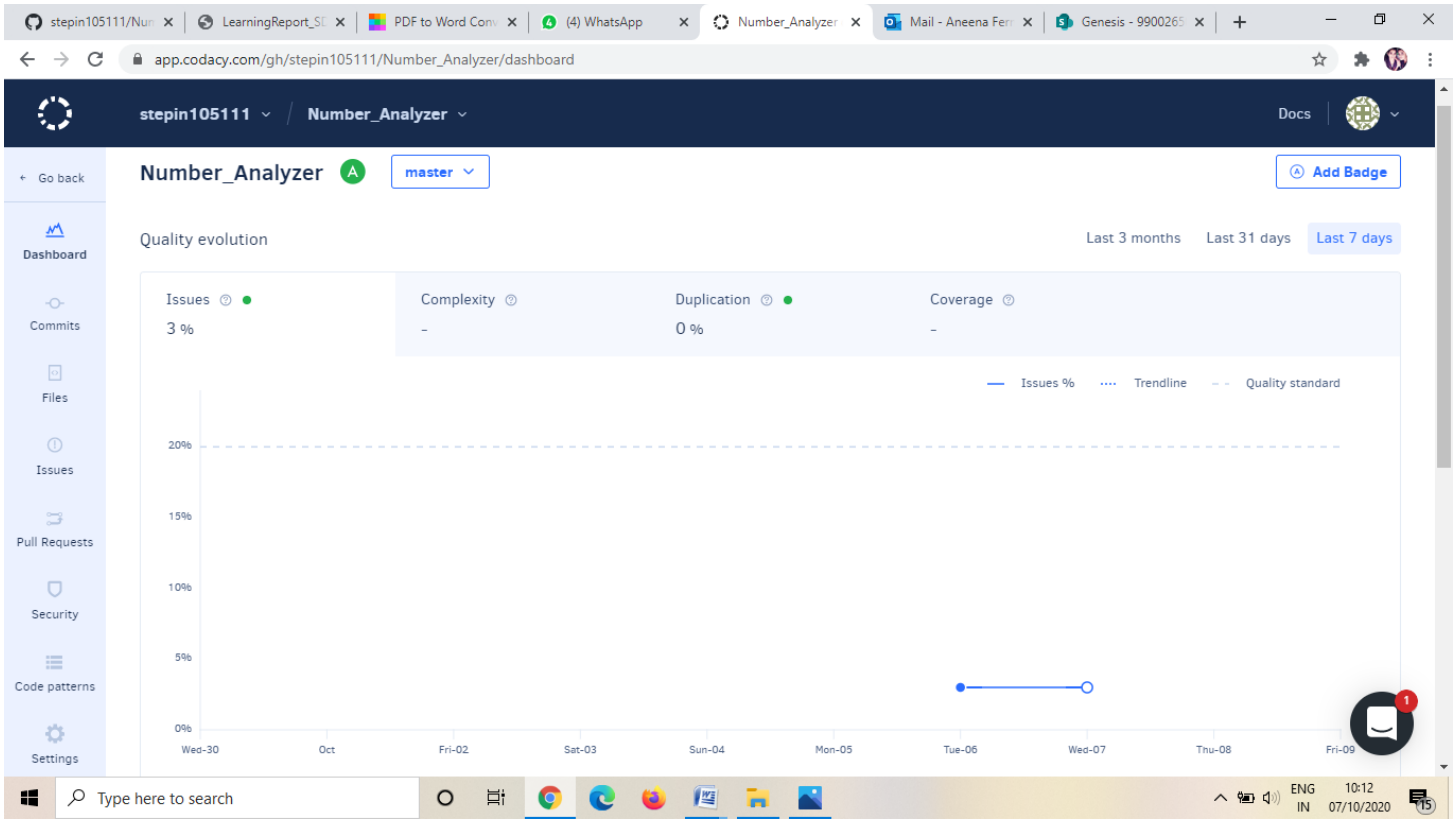
CPPCHECK



BADGES



CODACY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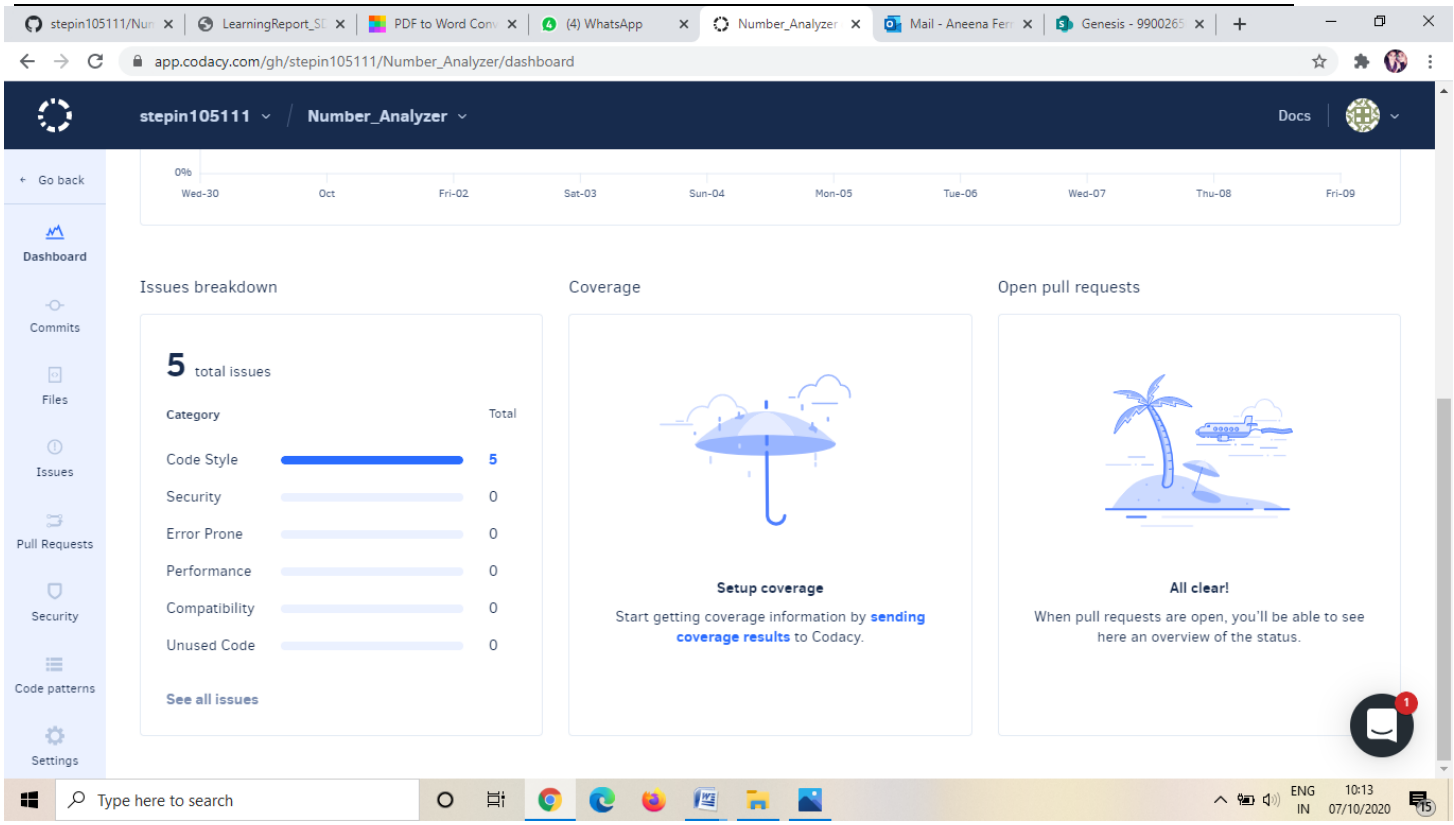
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Issues breakdown
5 total issues
Category
Total
Code Style 5
Security 0
Error Prone 0
Performance 0
Compatibility 0
Unused Code 0
See all issues
Coverage
Setup coverage
Start getting coverage information by sending coverage results to Codacy.
Open pull requests
All clear!
When pull requests are open, you'll be able to see here an overview of the status.
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