

N11: Plastic Number
Problem 6 - 8

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Chapter 1

User Story

1.1 User Story # 1

US#1 - Add two Numbers	
Story #	1
Description	As a user, I want to add two numbers, so that i can see the summation
Acceptance Test	And I know I am done when $2 + 3 = 5$
Estimated Points	1 Point
Priority	High
Constrains	The display should print up to 11 digits number.

1.2 User Story # 2

US#2 - Subtract two Numbers	
Story #	2
Description	As a user, I want to subtract two numbers, so that i can see the difference
Acceptance Test	And I know I am done when $3 - 2 = 1$
Estimated Points	1 Point
Priority	High
Constrains	The display should print up to 11 digits number.

1.3 User Story # 3

US#3 - Multiply two Numbers	
Story #	3
Description	As a user, I want to multiply two numbers, so that i can see the product
Acceptance Test	And I know I am done when $5 \times 2 = 10$
Estimated Points	1 Point
Priority	High
Constrains	The display should print up to 11 digits number.

1.4 User Story # 4

US#4 - Divide two Numbers	
Story #	4
Description	As a user, I want to multiply two numbers, so that i can see the quotient
Acceptance Test	And I know I am done when $6 / 2 = 3$
Estimated Points	1 Point
Priority	High
Constrains	The display should print up to 11 digits number. also, the second number shall not be zero.

1.5 User Story # 5

US#5 - Clear the wrong digit	
Story #	5
Description	As a user, I want to clear the wrong digit, so that i can update the number without entering the whole number again
Acceptance Test	And I know I am done when 123455 can be changed to 123456 by changing the last digit
Estimated Points	1 Point
Priority	Medium
Constrains	The display should print up to 11 digits number.

1.6 User Story # 6

US#6 - Save number in Memory	
Story #	6
Description	As a user, I want to save the number in memory, so that i can use it later.
Acceptance Test	And I know I am done when I press M the number should be stored in memory and letter M should be shown in the bar.
Estimated Points	2 Points
Priority	Medium
Constrains	It is limited to the size of the actual memory.

1.7 User Story # 7

US#7 - Save operations even if i pressed clear by mistake	
Story #	7
Description	As a user, I want to save the equation in memory, so that i can recall it again even if I pressed clear by mistake.
Acceptance Test	And I know I am done when I press recall button the previous equation should be recalled from memory.
Estimated Points	3 Points
Priority	High
Constrains	Huge usage of memory to store everything that has been entered into the calculator.

1.8 User Story # 8

US#8 - Get Plastic number	
Story #	8
Description	As a user, I want to get the plastic number, so that i can perform some operations.
Acceptance Test	And I know I am done when I press plastic number button, I get 1.324717957.
Estimated Points	3 Points
Priority	High
Constrains	The display should print 11 digits number.

1.9 User Story # 9

US#9 - Calculate circumradius of Snub Icosidodecadodecahedron	
Story #	9
Description	As a user, I want to calculate circumradius of Snub Icosidodecadodecahedron.
Acceptance Test	And I know I am done when I get the result 1.12689
Estimated Points	5 Points
Priority	Low
Constrains	The usage of this function is only valid for $a = 1$.

1.10 User Story # 10

US#11 - Enter two numbers	
Story #	11
Description	As a user, I want to enter two numbers so that i can perform some operations.
Acceptance Test	And I know I am done when I pressed 123 i got 123 on the screen.
Estimated Points	1 Point
Priority	High
Constrains	The display should print 11 digital numbers.

Chapter 2

Backward Traceability Matrix

	Interviewee	Internet	Life Experi- ence	Project De- scription
US#1			✓	
US#2			✓	
US#3			✓	
US#4			✓	
US#5			✓	
US#6			✓	
US#7	✓			
US#8				✓
US#9		✓		
US#10			✓	

Table 2.1: Backward Traceability Matrix