

Problem 6 [70 marks]

Identifier	EN_01
Statement	As a user, I should be able to see the operators/operations on the display screen that I am entering so that I can modify the expression if needed.
Constraint	The display screen will show a total of 10 inputs of the expression at a time.
Acceptance Criteria	Given I want to get the sum of 2 & 3, I should be able to see the expression as 2+3, on the display screen before I click “=” for the result.
Priority	Must have
Estimate	20 minutes

Identifier	EN_02
Statement	As a user, I should be able to delete wrongly entered operators/operations so that I can correct the expression I want to calculate.
Constraint	The user must have to enter atleast one operator/operation to delete it.
Acceptance Criteria	1. Given I have entered 1, 2, 3 (123). On pressing the backspace key, I should see 12 on the display screen. 2. Given I entered 5. On pressing the backspace key, I should see 0 on the display screen.
Priority	Must have
Estimate	15 minutes

Identifier	EN_03
Statement	As a user, I should be able to directly calculate the area of a circle by just providing the value of radius as this is the most needed calculation in my field of work and will save me a lot of time.
Constraint	The value of Radius should be greater than zero. ($r > 0$)
Acceptance Criteria	<ol style="list-style-type: none"> 1. Given I have clicked “Area” key. I will now click 5 (radius) to get the result 78.5 ($3.14 * 5 * 5$) displayed on the screen 2. Given I have clicked “Area” key. Now on giving the value of radius as -5 , the display screen will show “ERROR” .
Priority	Must have
Estimate	30 minutes

Identifier	EN_04
Statement	As a user, I should be able to choose the value of “pi” upto desired number of decimal points depending on my calculation, to get the precise result.
Constraint	
Acceptance Criteria	<ol style="list-style-type: none"> 1. Given I have clicked “pi” , on clicking “D” key if I enter 2 , the pi in my calculation will have value upto 2 decimal places i.e. 3.14 , which will be enough for me to calculate the circumference of a circle.
Priority	Should have
Estimate	35 minutes

Identifier	EN_05
Statement	As a user, I should be able to save the results of my calculation so that I can use it later.
Constraint	There must be atleast one entered value or computation done, after starting the calculator.
Acceptance Criteria	<ol style="list-style-type: none"> 1. Given I have calculated area of a circle with radius "5" , if I click "S" key, the result will be stored in calculator's memory for later use. 2. Given that I have just turned on the calculator and the display screen shows "0" , on clicking "S" nothing is stored in the memory.
Priority	Should have
Estimate	25 minutes

Identifier	EN_06
Statement	As a user, I should be able to see all my saved calculations so that I can decide which one to use.
Constraint	The user must have to save at least one computation in the saving list.
Acceptance Criteria	<ol style="list-style-type: none"> 1. Given I have saved $2+2=4$ and then $4-3=1$ by clicking "S" key after each computation. On clicking "H" key I should see 4, 1. 2. Given I have just started the calculator and no value is saved. On clicking "H" , "No value" will be displayed on the screen
Priority	Should have
Estimate	25 minutes

Identifier	EN_07
Statement	As a user, I should be able to operate on the last calculated answer directly.
Constraint	The user must have calculated one expression
Acceptance Criteria	<ol style="list-style-type: none"> 1. Given I calculated $2+2=4$, if I click “Ans” key and then $+$ 2 , the result displayed should be 6 ($4 + 2$) 2. Given I have not done any calculation, clicking “Ans” will do nothing.
Priority	Should have
Estimate	30 minutes

Identifier	EN_08
Statement	As a user, I should be able to upload my calculations in icloud, so that I can access them from anywhere, anytime.
Constraint	The user should have an icloud account.
Acceptance Criteria	<ol style="list-style-type: none"> 1. Given I have done a calculation, on clicking “iC” , the result is permanently stored in my icloud account.
Priority	Could have
Estimate	45 minutes