Deliverable 2 40089806 July 27, 2019

Problem 6: For your persona, elicit, decide, and create a set of user stories for your ETERNITY: NUMBERS. The constraints can be either local (that is, on a single user story) or global (that is, on multiple user stories).

- 1. **User Story Statement**: As a student, I want a calculator, which would display the formula for the Gaussian Integral, when its corresponding key is pressed on the calculator.
 - Constraints: The calculator should contain keys with headings that depict the function name.
 - Acceptance Criteria:

- Given: Calculator with ETERNITY:NUMBERS

When: Gaussian Integral key pressed

Then: Display the Gaussian Integral formula

Given: Calculator with ETERNITY:NUMBERS
 When: Key other than Gaussian Integral pressed

Then: Display nothing

Priority : High Estimate : 0

- 2. **User Story Statement**: As a student, I want a calculator, which would calculate the Gaussian Integral of a given number.
 - Constraints: The calculator should contain keys with headings that depict the function name.
 - Acceptance Criteria:
 - Given: Calculator with ETERNITY:NUMBERS

When: Gaussian Integral key pressed and number given as input

Then: Display the Gaussian Integral of the number

Priority : High Estimate : 1

- 3. **User Story Statement**: As a Professor, I want a calculator which would help me to check the Gaussian Integral for a given input number, while checking exam sheets of the students.
 - Constraints: The calculator should contain keys with headings that depict the function name.
 - Acceptance Criteria:
 - Given: Calculator with ETERNITY:NUMBERS and students answer for Gaussian Integral of a number

When: Gaussian Integral key pressed and number given as input

 ${\bf Then}:$ Display whether the student answer is correct or incorrect

Priority : High Estimate : 2

- 4. **User Story Statement**: As a student, I want a calculator, that would help me to calculate the volume of an irregular shaped object.
 - Constraints: The calculator should contain keys with headings that depict the function name.
 - Acceptance Criteria:
 - Given: Calculator with ETERNITY:NUMBERS

When: Gaussian Integral key pressed and dimensions of the shape are given

Then: Display the volume of the shape

• **Priority** : Medium

• Estimate: 3

- 5. **User Story Statement**: As a student, I want a calculator, which would calculate the Gaussian Integral of a polynomial equation.
 - Constraints: The calculator should contain keys with headings that depict the function name.
 - Acceptance Criteria:
 - Given: Calculator with ETERNITY:NUMBERS

When: Gaussian Integral key pressed and polynomial equation given as input

Then: Display the Gaussian Integral of the given equation

Priority : Low Estimate : 5

- 6. **User Story Statement**: As a student, I want a calculator, which would calculate the volume of an object using Disk Method which uses Gaussian Integration.
 - Constraints: The calculator should contain keys with headings that depict the function name.
 - Acceptance Criteria:

- **Given**: Calculator with ETERNITY:NUMBERS

When: Gaussian Integral key pressed and object dimensions given as input

Then: Display the volume of the object

Priority : Low Estimate : 8

Problem 7: Create a backward traceability matrix for your ETER-NITY: NUMBERS. This traceability matrix must have at least two columns, one for each user story, and the other for one or more sources from which the user story was elicited.

User Story ID	Source	Source
1	Interview of Adhish Raval	-
2	Interview of Adhish Raval	-
3	Interview of Adhish Raval	Persona
4	Interview of Adhish Raval	Youtube Video
5	Youtube Video	-
6	Youtube video	-

Table 1: Backward Traceability Matrix