unitED

Initial Product Backlog

The following non-functional epics are non-negotiable.

Epic Name Licensing

As the product owner I don't want to pay an licensing fees.

> **Story Name** Libraries
>
> As the product owner I don't want the system to use any "third party" libraries so we can avoid licensing issues.

Epic Name StyleGuideConformance

As a quality assurance engineer I want to be able to assure that the source code conforms to the company's style guide.

> **Story Name** UnitTestPackaging
>
> As a quality assurance engineer I want all JUnit tests to be in the testing package and include Test in the class name so I can confirm that the code conforms to the style guide.

> **Story Name** FileExtensions
>
> As a quality assurance engineer I want the system to only use the file extensions .java, .class, .cfg, .png, .txt, .dat, .html, .css, and .properties so I can confirm that the code conforms to the style guide.

SagaciousMedia

unitED

The following epics have the highest business value. The hope is that these epics can be completed during the first sprint.

Epic Name UserInterface

As a user I want the system to be consistent with the interaction design document.

Story Name EnteringNumericParts

As a user I want to be able to enter the numeric part of a measure using the soft keyboard so that I don't have to use the physical keyboard.

Story Name EnteringUnits

As a user I want to be able to enter the units part of a measure using the units dropdown so that it is obvious that the system supports units.

Story Name PredefinedUnits

As a user I want the system to the following units: Lengths of in, ft, yd, mi, mm, cm, m, km; Weights of oz, lb, ton; Times of sec, min, hr; and powers of w and kw so I can work with many common units.

Story Name ChoosingExistingUnits

As a user I want to be able to choose from a list of existing units in the units dropdown so that I can type less.

Story Name BackspacingDigits

As a user I want to be able to click on the Backspace Button to delete the right-most digit in the numeric part of a measure so that I can fix any mistakes.

Story Name DisplayOfCurrentOperand

As a user I want to be able to see the current operand in the input area so I can remember what I have done so far and fix any mistakes.

SagaciousMedia

Story Name Reset

As a user I want to be able to click on a "soft" button to clear both the current expression and the current operand so I can restart the data entry process.

Story Name Clear

As a user I want be able to click on a "soft" button to clear the current operand so I can fix mistakes I make when entering an operand.

Story Name Operations

As a user I want to be able to click on a "soft" button to indicate whether I want to perform addition, subtraction, multiplication, or division so I can use the mouse to perform calculations.

Story Name PartialCurrentExpression

As a user I want to see the left operand and operator in the display after I enter a the left operand and click an operator button so I can remember what I have done so far.

Story Name EqualsButton

As a user I want to be able to click on a "soft" equals button so I can evaluate the expression I have already entered.

Story Name EvaluatedCurrentExpression

As a user I want to see the current expression and its evaluation in the display after I enter the right operand and click the equals button so I can review the answer.

Story Name UndefinedNumber

As a user I want to be prevented from entering an operand that doesn't have a numeric part so I can avoid making mistakes.

Story Name UndefinedUnits

As a user I want to be prevented from entering an operand that doesn't have a unit so I can avoid making mistakes.

Story Name UnitSimplification

As a user I want the system to simplify units in the result so that the result is in a standard format. Note: It need not simplify like-units.

Story Name RunningCalculations

As a user I want to be able to use the result of evaluating an expression in the next expression when I click an operator button so I can perform "running calculations" (e.g., total a sequence of weights).

Story Name EndingRunningCalculations

As a user I want to be able to NOT use the result of evaluating an expression in the next expression when I start typing an operand so I can easily start a new calculation.

Story Name Sign

As a user I want to be able to click on the Sign Button to toggle the sign of the current operand so I can perform calculations more easily.

Epic Name BinaryOperations

As a user I want the system to support the most important binary operations so that I can use it for most of the calculations I will need to perform.

Story Name Addition

As a user I want to be able to add two measures.

Story Name Subtraction

As a user I want to be able to subtract two measures.

Story Name Multiplication

As a user I want to be able to multiply two measures.

Story Name Division

As a user I want to be able to divide two measures.

Story Name Conjunctions

As a user I want the system to support single -conjunctions and single /conjuctions as the units for the current operand so that I can use the system in a reasonably sophisticated way.

Epic Name UnaryOperations

As a user I want the system to support important unary operations.

Story Name Sign

As a user I want to be able to change the sign of a measure.

Epic Name ShutDown

As a user I want the product to be easy to shut down.

Story Name Exit

As a user I want to be able to exit the program from the File menu so that the product is east to shut down.

Story Name WindowClose

As a user I want to be able to exit the program by closing the window so that I don't have to use the menu if I don't want to.

Epic Name UserDocumentation

As a user I want the product to have built-in documentation that makes it easier to use for people who speak all of the supported languages.

> **Story Name** HelpFileFormat
>
> As a maintenance engineer I want the help pages to be in HTML so that they are easy to maintain.
>
> **Story Name** HelpFileDisplay
>
> As a user I want to be able to open help pages in a WWW browser so that I don't have to learn how to use a new help system.
>
> **Story Name** HelpFileContents
>
> As a user I want the help files to contain both text and "screen shots" so that I understand how to use the product.
>
> **Story Name** HelpSystemAvailabilty
>
> As a user I want the help system to be available to me when I am not connected to the Internet so that I can always get help.

Epic Name ProductInformation

As a user I want the product to make it easy for people to obtain information about the product.

> **Story Name** About
>
> As a user I want to be able to open an about box from the help menu so I can get information about the product.

unitED

The following epics have the next highest business value but there is no expectation that they can be completed during the first sprint. The hope is that they can be completed in the second sprint. Stories will be added in the future, as needed.

Epic Name Deployment

As a salesperson I want the product to be easy to deploy so that it is easier to sell.

Epic Name PhysicalKeyboard

As a user I want to be able to use the physical keyboard to enter operations (in keeping with the guideline of availability) so I can work more efficiently.

Epic Name SessionHistory

As a user I want to be able to see a history of the calculations that I have performed so far so I can review my work.

Epic Name OtherOperations

As a marketer I want to be able to describe a long list of operations (that maintain closure) so I can better market the product.

Epic Name LanguageSupport

As a salesperson I want the product to support multiple languages so that I can sell it in a wider variety of markets.

SagaciousMedia

The following epics have the lowest business value. The hope is that they can be completed in the third sprint. Stories will be added in the future, as needed.

Epic Name TeachingCapabilities

As a user I want to be able to record and playback a sequence of calculations in a file so I can teach people about units.

Epic Name Branding

As a marketer I want to be able to brand the the system for different potential customers to increase our market penetration.

Epic Name Preferences

As a marketer I want the user to be able to customize the operation of the product so that I can market it to a wider audience.

Epic Name StartUp

As a user I want to be able to start the product flexibly so that it is easier to use.

Epic Name ShutDown

As a user I want the product to shut down safely so that I don't lose any work.

Epic Name ImprovedExpressionEntry

As a user I want to be able to enter expressions more easily so that I can be more efficient.

Epic Name ComparingMeasures

As a user I want to be able to quickly compare two measures so that I can put them in order.