Group Without a Name

Arithmetic Expression Evaluator
Project Vision
Version <1.0>

Revision History

Date	Version	Description	Author
<09/24/2023>	<1.0>	First iteration of document	Jake Bernard

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Project Vision

1. Introduction

1.1 Purpose

The *Project Vision* exists to describe the aims of the *Arithmetic Expression Evaluator*, with emphasis upon the desired functionality and goals that the project team intends to implement in the final product.

1.2 Scope

The *Project Vision* is a very brief overview of the intended functionality of the *Arithmetic Expression Evaluator*. Specifics are intentionally left out to be explored within the iterations and changed the project evolves.

1.3 Definitions, Acronyms, and Abbreviations

See the *Project Glossary*.

1.4 References

The Project Vision references the following documents:

- *Project Description,* artifacts/project_description.pdf, University of Kansas, 2023

1.5 Overview

The *Project Vision* contains the *Introduction* and *Project Features*, the latter of which details different goal features/values which the project team intends the final product to contain.

2. Project Features

2.1 Arithmetic Expression Evaluation

The final product should be able to correctly parse and give the answers to arithmetic expressions entered by the user. Support for the exact operations can be found in the *Project Description.*

2.2 Multiple representations of numbers

The *Arithmetic Expression Evaluator* (or *A2E*) should be able to represent numbers and the outputs of operations in multiple ways, including support for certain important mathematical constants like pi and Euler's number, support for scientific notation, and the ability to switch between decimal representation and fractional representation of non-integers.

2.3 Simple and Clean User Interface

The *A2E* should run as a windowed desktop application featuring a simple, minimal, and intuitive interface.

2.4 Bug-free

The *A2E* should run without error and handle invalid arithmetic expressions seamlessly without crashing and giving appropriate responses.

2.5 Excellence and Care

The *A2E* as a final product should be an expression of the team's desire to create excellent software; the enjoyment the project team experienced during the creation of the software and the work put in should show through the design, functionaltiy, and user experience. The application should feel and look nice and reflect the joy of software creation.