

Ultimate Calculator Problem Statement

L01 Group 15

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Introduction

Many people struggle when faced with challenging mathematical problems and they soon become overwhelmed with the vast amount of online resources at their disposal. They become unsure of where to begin when learning how to solve these problems. When computing complex problems by hand, the answers are prone to human error and the user spends a large portion of their time performing the calculations. The Ultimate Calculator helps people to save time by computing things quickly and efficiently. When facing an unfamiliar problem with a high learning curve, a simple and easy to use calculator is necessary to help aid in the understanding of new material and concepts. People tend to spend unnecessary time trying to find various websites to help solve their problem. The Ultimate Calculator is an open source python program that tries to fix this issue by allowing the user to access the varying tools in one simple and easy to use program. A vast majority of similar applications require the user to be online when accessing the tools. The Ultimate Calculator is an offline tool that lets the user delve into its many functionalities without the need for an internet connection.

Importance

These problems are important to our stakeholders for many reasons. First of all, performing computations by hand or without the help of external tools can be very time consuming and require a lot of energy. By solving this problem, we can help stakeholders save these valuable resources. Secondly, if a stakeholder does not possess the abilities to perform a computation or are learning a new concept, they may be limited in what they can do. Removing these limits can allow a user a quick and easy way to get the information they need, no matter their capabilities. Finally, complex interfaces and overwhelming amounts of resources can frighten stakeholders and make solving problems much harder. Having easy access to several tools in one spot through a simple interface will make tasks much more convenient and simple for stakeholders.

Context

The primary stakeholders in this project are students who need a calculator for school work as well as others who simply want to compute something in one spot. [Additional stakeholders to this project will be the TA's for the 3XA3 course, along with Dr. Bokhari.](#) Users can use a desktop or laptop to access the program. The calculator can be run offline on any computer with python, which makes the calculator accessible to most people with a computer. It can also run on any popular OS such as Windows, Linux, and MacOS which further contributes to its accessibility.