Adventure Time

The Quest for Enchiridion

OUTPUT 4

Del Rosario, Cara Isabel

Jose, Carlos Miguel

Uy, Orrin Landon

STORY

YOU are an adventurer seeking to become a hero in the Land of Ooo. To do this, you must acquire the Book of Enchiridion, an ancient book that has magical properties and everything a hero needs to know. However, in order to unlock the book, it needs the six missing gems on the front cover. Your task now is to collect these gems by answering a series of challenges.

After collecting the six gems, you will be rewarded the Book of Enchiridion because you have proved your dedication and worthiness.

General Mechanics

For each gem, there are two questions to be answered in order to collect the gem. In total, there are twelve (12) Optimization problems to be solved by the player.

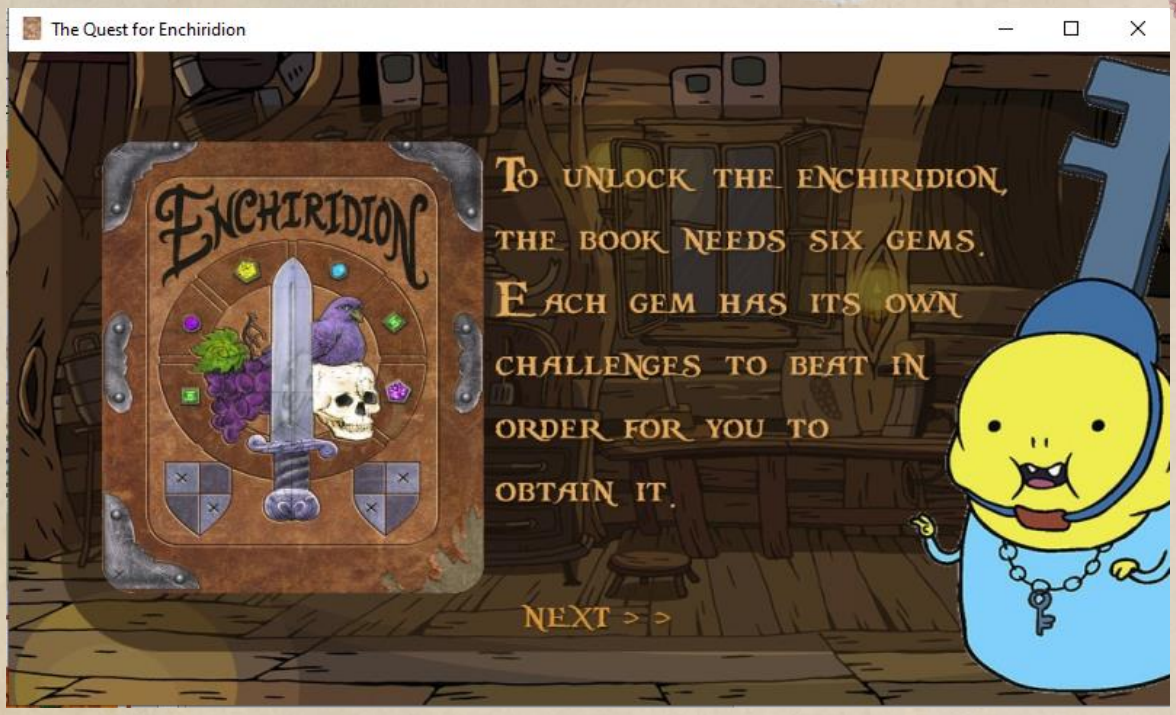
You only have three lives per game, meaning only three mistakes can be made. Once you reach four mistakes, the game is over and you will have the choice to start again.

You may view the answers and solutions in the "Solutions" option in the menu. You will have the option to exit the game at any time.

Mechanics

1. Download the .exe file "BasCal.exe". This file is virus free as double checked by each member. When you see this starting screen, use your mouse and click "Start".

Mechanics



2. The next few parts of the game will introduce you to the story and basic mechanics of the game as introduced by the character Key-per.

Mechanics

3. You will be given the opportunity to ask some questions to Key-per before starting the game. Once finished, click "Start Game" to play.

Mechanics

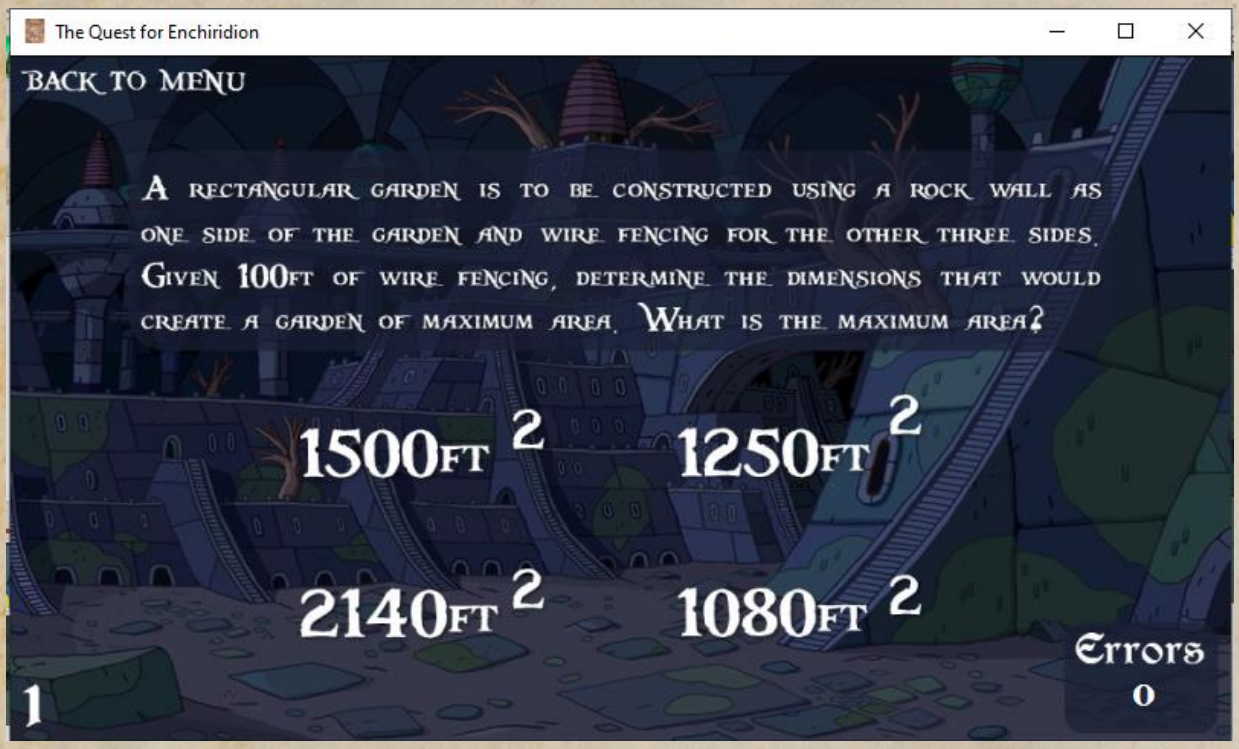
4. You will be directed to the Main Menu.

"Start Quest" will start the actual game with challenges.

"Solutions" will provide you answers and explanations to the questions given.

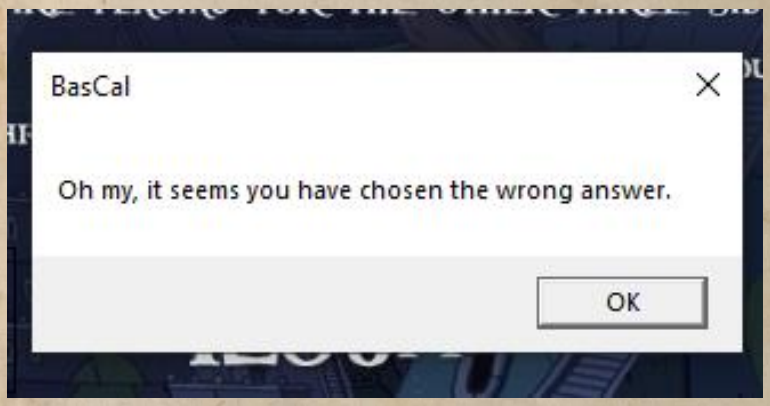
"Discussions" will provide more insight on Optimization in Calculus.

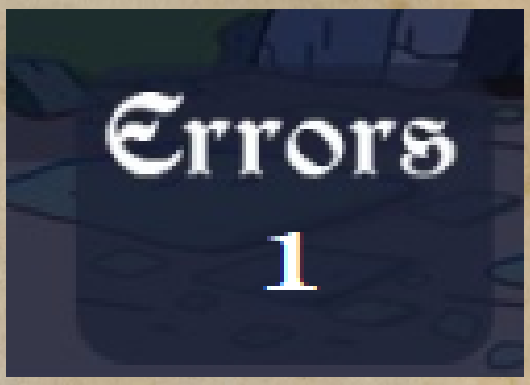
Mechanics



5. Once you press "Start Quest", you will be directed to the first Optimization problem. There are four choices per question and only ONE answer is right. Click on the answer of your choice. You have the option to go back to the menu at any time.

Mechanics





6. Getting an answer wrong will show a popup message like the one above. In addition to that, the Error counter located at the bottom right of the screen will count your mistakes.

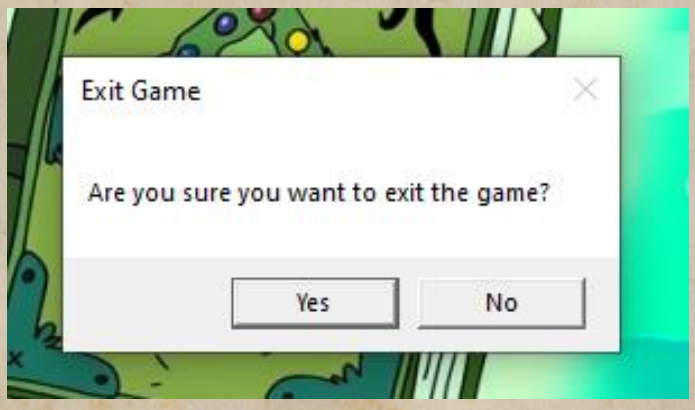
7. You are only allowed three mistakes per game. Once you reach 4 mistakes, the image above will pop up, indicating that you have lost. You have the choice to play again or go back to the menu.

Mechanics

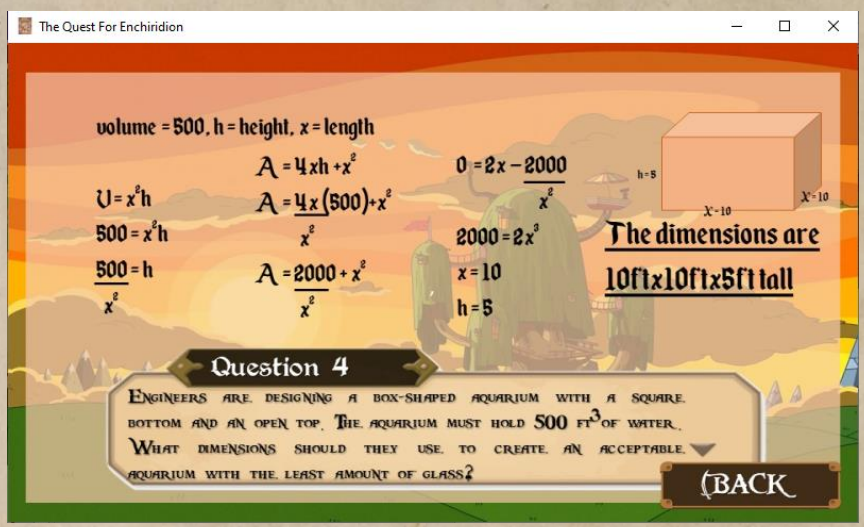
8. After every two questions, the game will let you know that you have collected a gem. In total, there are 6 gems to collect, meaning that there are 12 questions to solve. Continue to answer the problems to reach the end of the game.

Mechanics

9. If you manage to answer all 12 questions correctly, you will reach the ending that says you have option. You have the option to play again or close the game. If you choose to exit the game, it will ask you again to be sure.

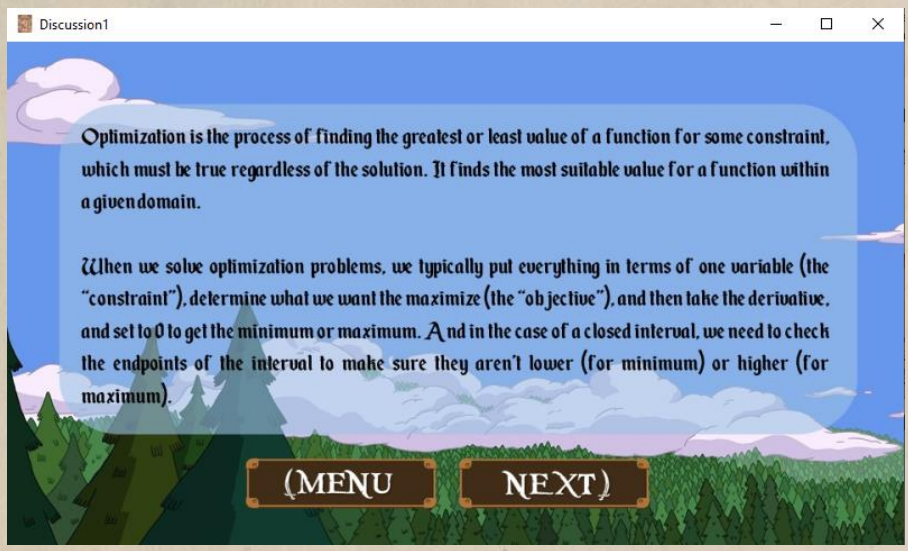


Mechanics



10. If you press "Solutions" in the Menu page, you will be directed to this page. Pressing a number will reveal the answer and solution to the question. It will direct you to the respective solution, and you can press "Back" to go back to the solutions menu.

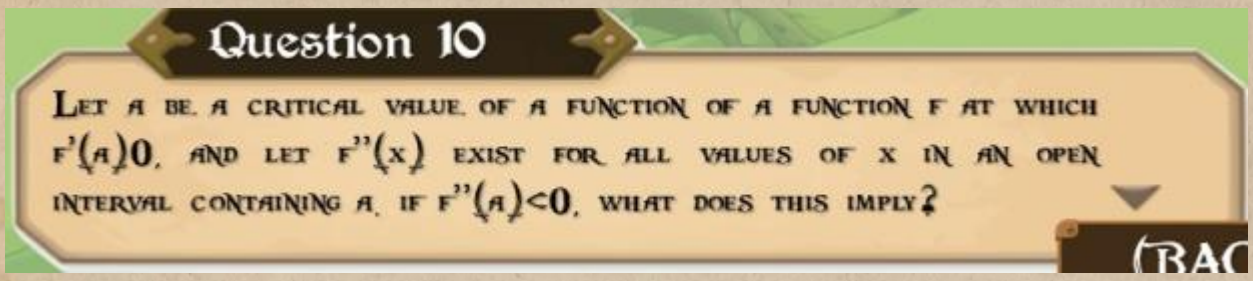
Mechanics



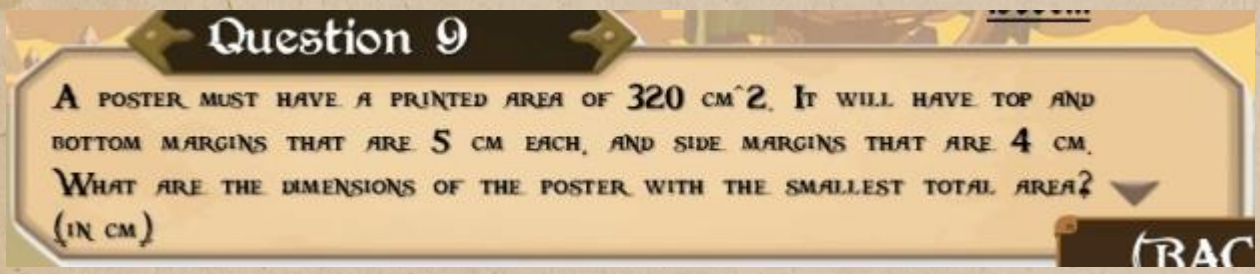
11. If you press "Discussions" from the Main Menu page, it will direct you to a short discussion on Optimization in Calculus. It will also provide some tips in solving Optimization problems.

CALCULUS CONCEPTS

This game aims to help the player understand the concept of Optimization in Calculus.



This game features problems that are concept-based, which are questions regarding the general knowledge needed to understand optimization.



Meanwhile, it also features questions that focus more on the application of the concepts discussed in this topic. It is equally important to grasp both concept and application questions to fully understand the topic.

The calculus concepts introduced are optimization, minima and maxima. The game features 12 questions with varying difficulty taken from these concepts to help enhance the player's skills. The player is only given a fixed amount of chances to make a mistake throughout the entire game. This helps to decentivice guessing as the game features multiple choices.

Additionally, in the game, there is a discussion and solutions feature. In the discussions, a basic introduction and a few tips are included to help the player understand what is being done. In the solutions, there features the complete solutions to all of the 12 questions featured. Here, the player can compare their solutions to the correct solutions in order to identify any possible mistake in their own solutions.