User Manual

Certificate of Deposit Calculator

A “Certificate of Deposit” (CD) is a type of savings account where the account holder may earn a higher interest rate with the tradeoff of being penalized for removing the capital from the account prior to the term selected for the CD. This CD calculator allows the user to select the desired CD term and choose the starting capital to save. The calculator will then display the total amount the user will have at the end of the selected term along with the average monthly dividends during the selected term.

# Window 1: The Term Selection

A screenshot of a computer

Description automatically generated

**2**

**1**

The landing window has two relevant widgets.

1. The drop down on the left of the window allows the user to select the desired CD term. A valid term *must* be selected prior to moving the next window.
2. The “Next” button will change the window to the rate calculation window. However, the “Next” button will not activate until a term is selected.

# Window 2: The Compound Interest Calculation

A padlock on a stack of money

Description automatically generated

**6**

**5**

**4**

**3**

**2**

**1**

The compound interest calculation window has four relevant widgets and two relevant displays.

1. The “Principal to be invested” entry is where the user enters the dollar amount to be put into the CD at the start of the term. A floating point number (i.e. whole number, number with a decimal, or number written in exponential format) must be put in this box. Any other entry will not calculate a CD amount.
2. The “Calculate” button will calculate the total capital at end of term and average dividends per month if a valid entry is provided in the “principal to be invested” entry. If an invalid entry is given, it will return to the default state (pictured above).
3. The “Back” button will return to the term selection window, where a different term may be selected.
4. The “Exit” button will exit the program.
5. The “Total Capital at End of Term” display shows the ending amount of the CD after the number of months given in the term have expired.
6. The “Average dividends per month” display shows how much additional money the account would make, on average, over the period. Since interest is compounded, more dividends will be returned at the end of the term than the beginning.