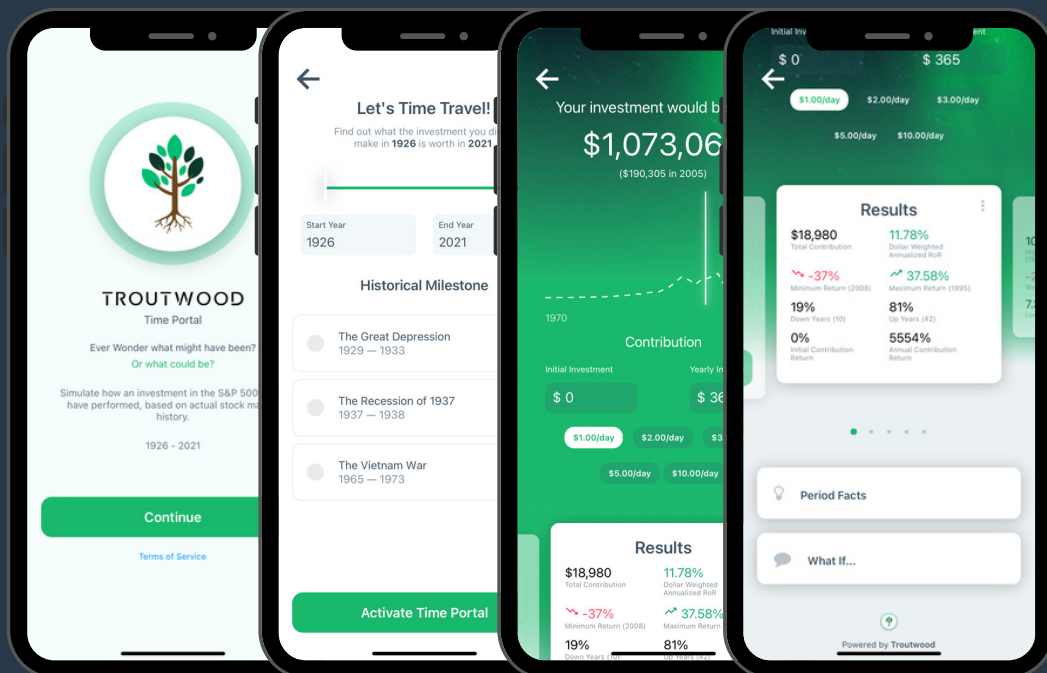


TIME PORTAL

for *teachers*



Learn to invest with understanding



GUIDE OVERVIEW

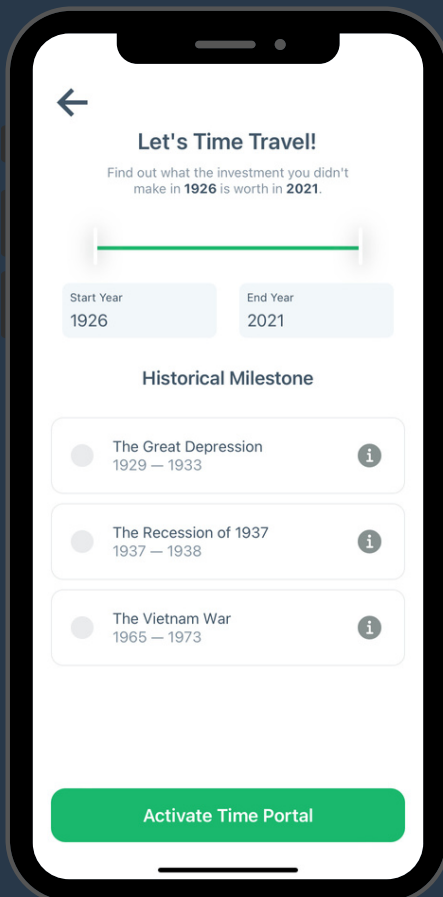


HOW TO USE TIME PORTAL

Time Portal is an investment education app that teaches students the potential in investing. Learn about:

- (1) time value of money
- (2) dollar-cost averaging
- (3) long-term investing
- (4) and more . . .

The app allows users to simulate how an investment in the S&P 500 could have performed along with period-specific results, milestones, consumer, and economic and political data.



Apple App Store



Google Play Store

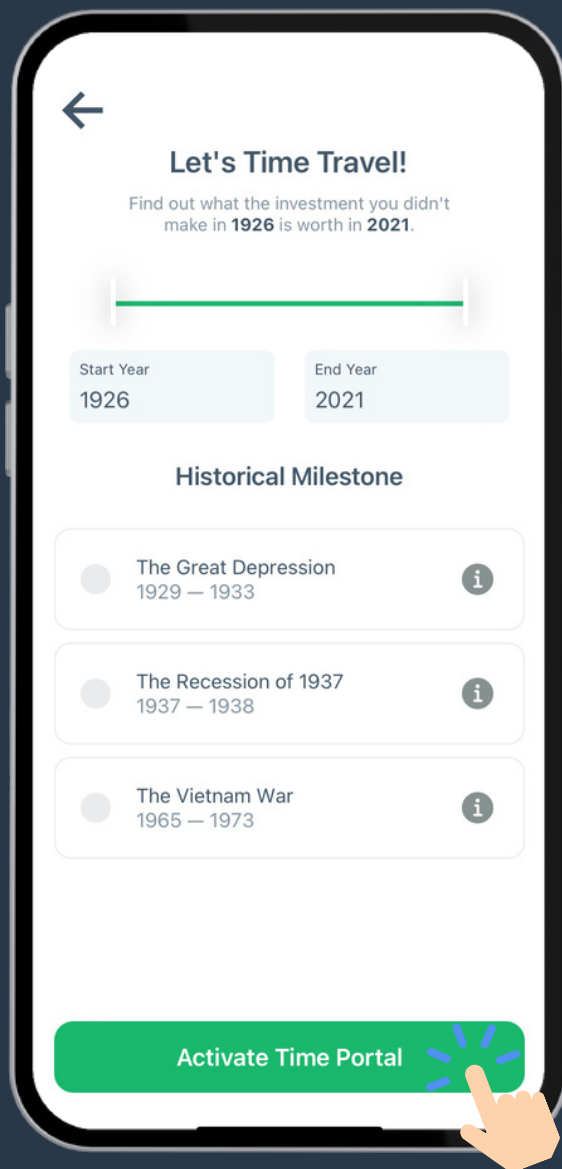
LEARNING OBJECTIVES

INVEST WITH UNDERSTANDING

- **Time Value of Money:** Students will recognize and understand the concept of time value of money, recognize that the value of money changes over time due to factors such as inflation and interest rates.
- **Dollar-cost averaging:** Students will learn the concept of dollar-cost averaging, understand how regular investments can help mitigate the impact of market fluctuations and potentially yield favorable long-term investment returns.
- **History of the stock market:** Students will use period-specific results to simulate an investment in the S&P 500 during different economic, political, and consumer driven events. They will learn to connect historical events to investment performance and identify patterns or trends.
- **Long-term investing:** Students will understand the significance of sticking to an investment plan, even during market downturns or periods of volatility. They will learn the benefits of maintaining a disciplined and consistent investment strategy.
- **Economic Correlations:** Students will explore the app's provided information on historical milestones, consumer trends, economic and political data. They will analyze how these factors influenced investment performance and understand the interplay between these broader events and financial markets.

GETTING STARTED

ENTER START YEAR AND END YEAR



(1) Input desired **start** year

(2) Input desired **end** year

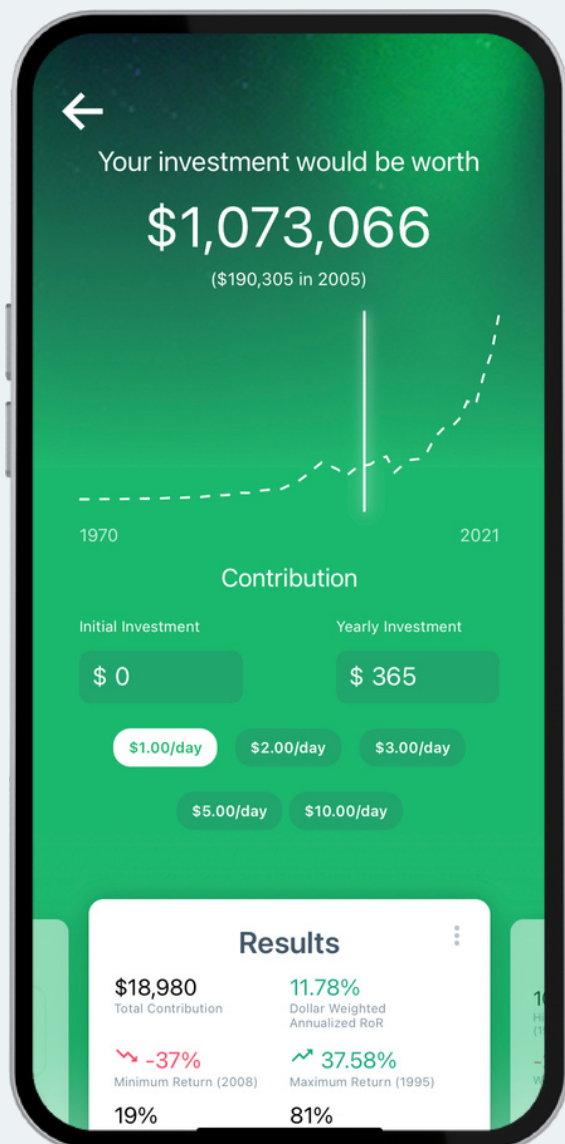
(3) Select "Activate Time Portal"

Or,

(1) Select a historical milestone

(2) Select "Activate Time Portal"

YOUR INVESTMENT COULD BE WORTH...



Total Worth

Time Portal calculates the potential worth of the investment you didn't make back. The app employs historical financial data and growth rates to provide an estimate of the investment's value in 2021.

Ex. \$1,073,066 would be the total worth with a 1970 start date and a 2021 end date.

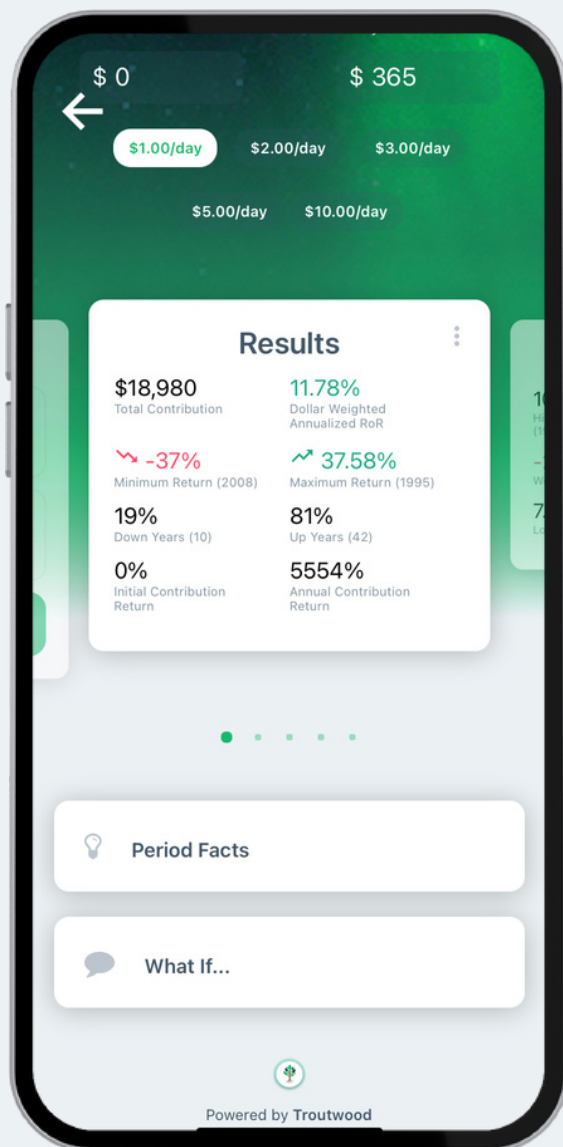
Contribution

The estimated investment value can be changed by altering the initial investment or yearly **recurring investment**. The amount contributed per day can also be changed to see how it would affect the yearly investment, the investment total worth at the top, and the total contribution in the results section.

Investments results

The results section shows the total contribution, dollar weighted annualized Rate of Return (RoR), and different return rates.

ANALYZE HISTORICAL DATA AND EVENTS



Economics

This section highlights the highest and lowest unemployment percentage, best and worst GDP, and highest and lowest price to earnings ratio.

Politics

This section denotes the number of years of democrats and republicans and the mean return and recessions, among others, under both parties respectively.

Consumer

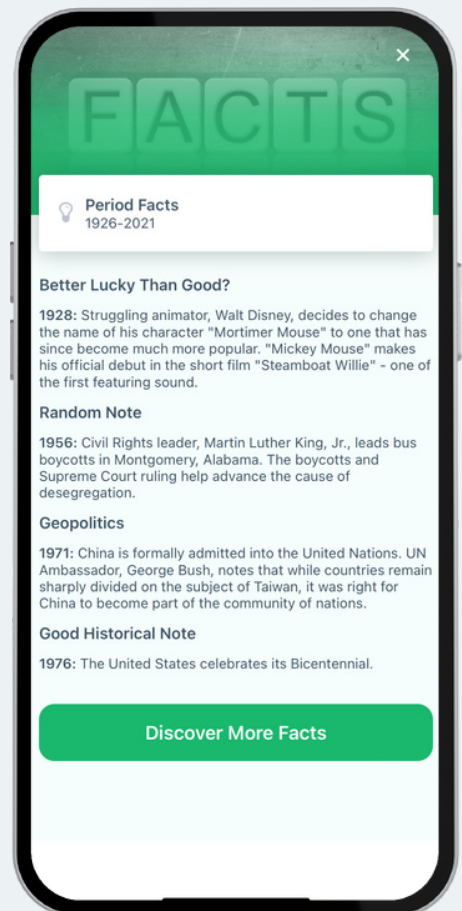
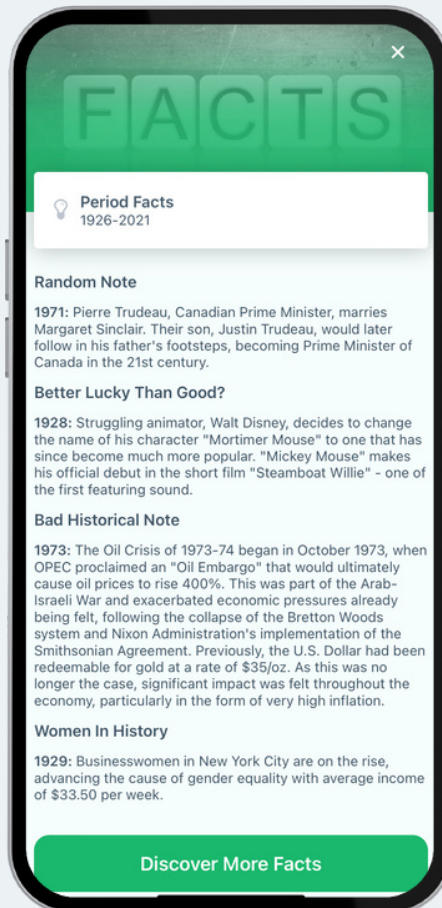
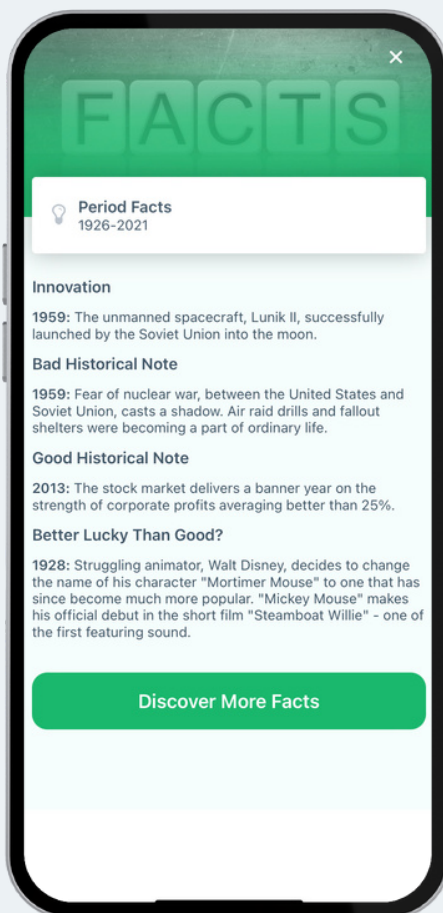
This section reflects tuition, median house price, mortgage payment, house downpayment, mortgage rate and tuition increase for both years.

Historical Milestones

To delve deeper into any of the historical milestones listed, simply tap on the event of your interest. A detailed view will appear, providing additional information, such as the significance, impact, and related developments associated with that particular milestone.

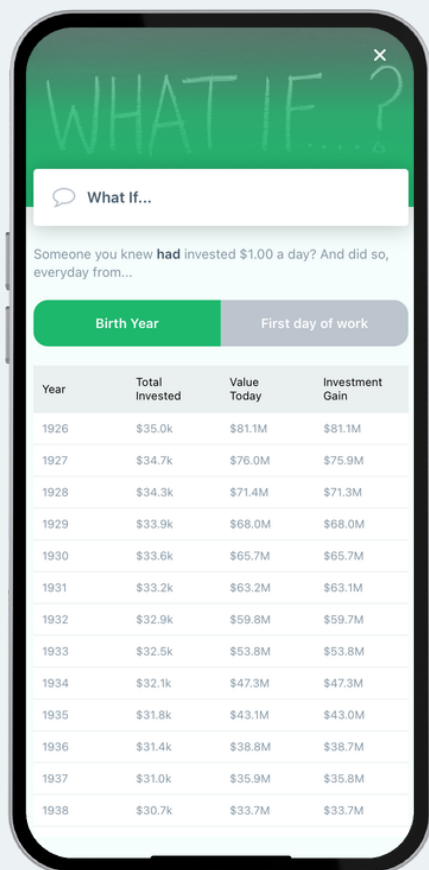
PERIOD FACTS

Use this section to engage students with historical notes, facts on geopolitics, women in history, and innovations, among other facts, as they learn about the potential in investing.



WHAT IF...?

Use this section to describe to students the impact of investing \$1.00 a day in the S&P 500. Historical career cycles (42-years in length) and birth year data are provided.



Year	Total Invested	Value Today	Investment Gain
1926	\$35.0k	\$81.1M	\$81.1M
1927	\$34.7k	\$76.0M	\$75.9M
1928	\$34.3k	\$71.4M	\$71.3M
1929	\$33.9k	\$68.0M	\$68.0M
1930	\$33.6k	\$65.7M	\$65.7M
1931	\$33.2k	\$63.2M	\$63.1M
1932	\$32.9k	\$59.8M	\$59.7M
1933	\$32.5k	\$53.8M	\$53.8M
1934	\$32.1k	\$47.3M	\$47.3M
1935	\$31.8k	\$43.1M	\$43.0M
1936	\$31.4k	\$38.8M	\$38.7M
1937	\$31.0k	\$35.9M	\$35.8M
1938	\$30.7k	\$33.7M	\$33.7M

The sections reflect the total invested, value today and investment gain.

Bonus Question: How many career cycles are provided? What is the average investment gain?

DISCUSSION PROMPTS



Reflect on the time period you chose. Why did you pick that time period? What historical milestones did you consider?

Enter the year your parents were born for the start year.

What do you think of that number? What would your parents think of that estimated value? Now enter the year your grandparents were born 🤔

Discuss the importance of continued contributions. Did you make an initial investment? Did you decide to invest \$1, \$2, \$3, \$5, or \$10/day? Do you think you actually could invest that much per day? And, why?

Does the "what if "section, increase your confidence? Do you believe what you see? Can you invest at least \$1/day, or more? Will you do it?

STUDENT CHALLENGE



Remember your daily investment? Choose a different value and select the same historical milestone and re-activate the time portal! Then, switch things up and try a few different historical milestones.

Take notes on your total investment worth vs your total contribution.

- What changes do you notice between the 3 time periods you chose?
- Were any time periods negative?
- What was your best-performing time period
- What changes did you notice between the 3 daily investments you chose?

How do the results of this exercise make you feel? Do you feel more comfortable investing your money in the future?

Comparative analysis: How did a 1x investment of \$100 perform during the Great Depression? How did a 1x investment of \$100 and recurring investment of \$100 perform?

CLASSROOM CHALLENGES



Historical Analysis Challenge:

Present students with specific historical periods and ask them to analyze the investment performance of the S&P 500 during those times. They should examine period-specific results, milestones, consumer trends, and economic and political data to understand the impact of various factors on investment outcomes.

Risk Assessment Challenge:

Provide students with different investment scenarios with varying levels of risk. Ask them to evaluate the risk associated with each option and explain how concepts like dollar-cost averaging and sticking to a plan can mitigate risk over time.

Reflection & Decision-making Challenge:

Provide students with real-world investment scenarios and ask them to reflect on the concepts they have learned. They should make informed investment decisions based on their understanding of time value of money, dollar-cost averaging, and sticking to a plan, while considering potential risks and rewards.

FINGLISH LIBRARY

Dollar Cost Averaging

- A strategy where you invest a fixed amount of money at regular intervals, regardless of the price of the investment. This smooths out the impact of market fluctuations and can result in buying more shares when prices are low and fewer shares when prices are high

Time Value of Money

- The concept that money available today is worth more than the same amount of money in the future. This is because money can be invested or earn interest over time, so having it now has more value than having it later.

S&P 500

- A stock market index that represents the performance of 500 large publicly traded companies in the United States. It provides a snapshot of how these companies, across various industries, are performing in the stock market.

Long-Term Investing

- A strategy where individuals buy and hold investments, such as stocks or bonds, for an extended period, typically years or even decades. The goal of long-term investing is to benefit from the potential growth and compounding effects over time, rather than trying to make quick profits by frequently buying and selling investments.

Rate of Return (RoR)

- A measure (typically expressed as a percentage) that shows how much an investment has gained or lost over a specific period. The rate of return helps investors assess the profitability or performance of an investment. A positive rate of return indicates a profit, while a negative rate of return indicates a loss. It is a simple way to gauge the financial success or failure of an investment and is often used to compare different investment opportunities.