For each of the fields for our objects, the doubles will measure as follows:

// all prices and values will be pulled from closing prices as of 5/28/21 or 6/1/2011 for ten year averages
Price (double): Measures actual price $

Change (double): Measures change in price as %. Not really used anywhere, just used in the holding information menu.
// change is calculated from closing price as of 4/28/21 and 5/28/21

Dividend (double): Measures dividend as % of price
MortgageSim(double): Measures % **decrease** when the simulator is ran (unless otherwise specified), will be used to find change in $ value
// change is calculated from closing price as of September 29th and October 27th 2008

COVIDSim(double): Measures % **decrease** when the simulator is ran (unless otherwise specified), will be used to find change in $ value
// change is calculated from closing price as of February 21st and March 23rd 2020

TenYear(double): Measures change in price as %, will be used to find change in $ value (most will likely be over 100%)

TwentyYear(double): Measures change in price as %, will be used to find change in $ value (most will likely be over 100%)

I added in some tables to illustrate what kind of outputs we should be getting from each one of the holdings after running the simulations. The letters represent which simulation is being run, the "inputs" I put in are just the price per share/item as an example, Div & Years is dividend yield/years input. The output % has + or – next to the values just to clarify if value is going up or down based on the simulation. Most of the outputs are the ending price of something after a simulation, some of the outputs are the amount gained after a simulation.

- A Dividend simulator
- B Mortgage Crisis simulator
- C COVID19 simulator
- D Ten year growth simulator
- E Twenty year growth simulator

EQUITIES:

GSPC, S&P 500 –
Name (String): GSPC, S&P 500
Price (double): 4204.11
Change (double): 0.55
Dividend (double): 1.38
MortgageSim(double): 30.03
COVIDSim(double): 32.96
TenYear(double): 136
TwentyYear(double): 272

Simulations	Inputs	Div & years	Output %	Output $
A	4204.11	1.38/10	+1.38	617.55
B	4204.11		-30.03	2941.61
C	4204.11		-32.96	2818.43
D	4204.11		+136	9921.7
E	4204.11		+272	15639.3

DJI, Dow Jones Industrial Average -
Name (String): DJI, Dow Jones Industrial Average
Price (double): 34529.45
Change (double): 2.1
Dividend (double): 2.24
MortgageSim(double): 19.16
COVIDSim(double): 33.86
TenYear(double): 150.3
TwentyYear(double): 300.6

Simulations	Inputs	Div & years	Output %	Output $
A	34529.45	2.24/10	+2.24	8562.69
B	34529.45		-19.16	6615.85
C	34529.45		-33.86	11691.67
D	34529.45		+150.3	86427.2
E	34529.45		+300.6	138325

NASDAQ, IXIC –
Name (String): NASDAQ, IXIC
Price (double): 13748.74
Change (double): - 2.2
Dividend (double): 1.17
MortgageSim(double): 24.08
COVIDSim(double): 28.16
TenYear(double): 118.05
TwentyYear(double): 236.1

Simulations	Inputs	Div & years	Output %	Output $
A	13748.74	1.17/10	+1.17	1695.99
B	13748.74		-24.08	10438.04
C	13748.74		-28.16	9877.1
D	13748.74		+118.05	29979.1
E	13748.74		+236.1	46209.5

Amazon.com, AMZN –
Name (String): Amazon.com, AMZN
Price (double): 3223.07
Change (double): negative 6.8
Dividend (double): 0

MortgageSim(double): 21.73
COVIDSim(double): 11.92
TenYear(double): 1476.15
TwentyYear(double): 2952.3

Simulations	Inputs	Div & years	Output %	Output $
A	3223.07	0/10	0	0
B	3223.07		-21.73	2522.69
C	3223.07		-11.92	2838.88
D	3223.07		1476.15	50800.4
E	3223.07		2952.3	98377.8

Boeing, BA –
Name (String): Boeing, BA
Price (double): 247.47
Change (double): 1.8
Dividend (double): 0
MortgageSim(double): 13.11
COVIDSim(double): 71.22
TenYear(double): 234.12
TwentyYear(double): 468.25

Simulations	Inputs	Div & years	Output %	Output $
A	247.47	0/10	0	0
B	247.47		-13.11	215.02
C	247.47		-71.22	71.22
D	247.47		+234.12	826.84
E	247.47		+468.25	1406.24

Exxon Mobil, XOM -
Name (String): Exxon Mobil, XOM
Price (double): 58.37
Change (double): 0.4
Dividend (double): 5.94
MortgageSim(double): 10.76
COVIDSim(double): 44.63
TenYear(double): negative 28.27
TwentyYear(double): negative 56.54

Simulations	Inputs	Div & years	Output %	Output $
A	58.37	5.94/10	+5.94	45.57
B	58.37		-10.76	52.08
C	58.37		-44.63	32.31
D	58.37		-28.27	41.86
E	58.37		-56.54	25.36

BONDS AND PROPERTY:

Vanguard Intermediate Term Bond Index, VICSX –
Name (String): Vanguard Intermediate Term Bond Index, VICSX
Price (double): 3000
Change (double): 0.04
Dividend (double): 2.6
MortgageSim(double): 11.47
COVIDSim(double): 11.74
TenYear(double): 18.03
TwentyYear(double): 36.07

Simulations	Inputs	Div & years	Output %	Output $
A	3000	2.6/10	+2.6	877.88
B	3000		-11.47	2655.9
C	3000		-11.74	2647.8
D	3000		+18.03	3540.9
E	3000		+36.07	4082.1

Delaware Extended Duration Bond Fund Class C, DEECX –
Name (String): Delaware Extended Duration Bond Fund Class C, DEECX
Price (double): 3000
Change (double): 0.02
Dividend (double): 6.6
MortgageSim(double): 11.47
COVIDSim(double): 19.45
TenYear(double): 9.07
TwentyYear(double): 18.15

Simulations	Inputs	Div & years	Output %	Output $
A	3000	6.6/10	+6.6	2684.51
B	3000		-11.47	2655.9
C	3000		-19.45	2416.5
D	3000		+9.07	3272.1
E	3000		+18.15	3544.5

Medium suburban house –
Name (String): Medium suburban house
Price (double): 100000
Change (double): 0.3
Dividend (double): 0
MortgageSim(double): decrease 16
COVIDSim(double): increase 10
TenYear(double): 38
TwentyYear(double): 76

Simulations	Inputs	Div & years	Output %	Output $
A	100000	0/10	0	0
B	100000		-16	16000

C	100000		+10	10000
D	100000		+38	38000
E	100000		+76	76000

Large suburban house –
Name (String): Large suburban house
Price (double): 250000
Change (double): 0.3
Dividend (double): 0
MortgageSim(double): decrease 16
COVIDSim(double): increase 10
TenYear(double): 38
TwentyYear(double): 76

Simulations	Inputs	Div & years	Output %	Output $
A	250000	0/10	0	0
B	250000		-16	40000
C	250000		+10	25000
D	250000		+38	95000
E	250000		+76	190000

Plot of land outside the city –
Name (String): Plot of land outside the city
Price (double): 25000
Change (double): 0.3
Dividend (double): 0
MortgageSim(double): decrease 16
COVIDSim(double): increase 10
TenYear(double): 38
TwentyYear(double): 76

Simulations	Inputs	Div & years	Output %	Output $
A	25000	0/10	0	0
B	25000		-16	4000
C	25000		+10	2500
D	25000		+38	9500
E	25000		+76	19000

Plot of land in the city –
Name (String): Plot of land in the city
Price (double): 50000
Change (double): 0.3
Dividend (double): 0
MortgageSim(double): decrease 16
COVIDSim(double): increase 10
TenYear(double): 38
TwentyYear(double): 76

Simulations	Inputs	Div & years	Output %	Output $
A	50000	0/10	0	0
B	50000		-16	8000
C	50000		+10	5000
D	50000		+38	19000
E	50000		+76	38000

Doge -
Name (String): Doge
Price (double): 420.69
Change (double): 10
Dividend (double): 6.9
MortgageSim(double): 98
COVIDSim(double): 99
TenYear(double): 420
TwentyYear(double): 840

Simulations	Inputs	Div & years	Output %	Output $
A	420.69	6.9/10	+6.9	819.85
B	420.69		-98	8.41
C	420.69		-99	4.2
D	420.69		+420	2187.59
E	420.69		+840	3954.48