Name: S. Mert Halici
ID: R00172213
Email: sabri.halici@mycit.ie

IT Proj. Mgmt – Lab 4

16/10/20

Q1.

	Project A	**Project B**	**Project C**
NPV @ 8%	2,111.13	2,365	2,421
NPV @ 10%	1,720	1,818	1,716
NPV @ 12%	1,356	1,308	1,070

For some, I will remove the 'cents' as to make it look neater.

How to calculate NPV?

Ct
--- + ... + ...
(1+r)t

So, you just add up every year and then you get your answer.

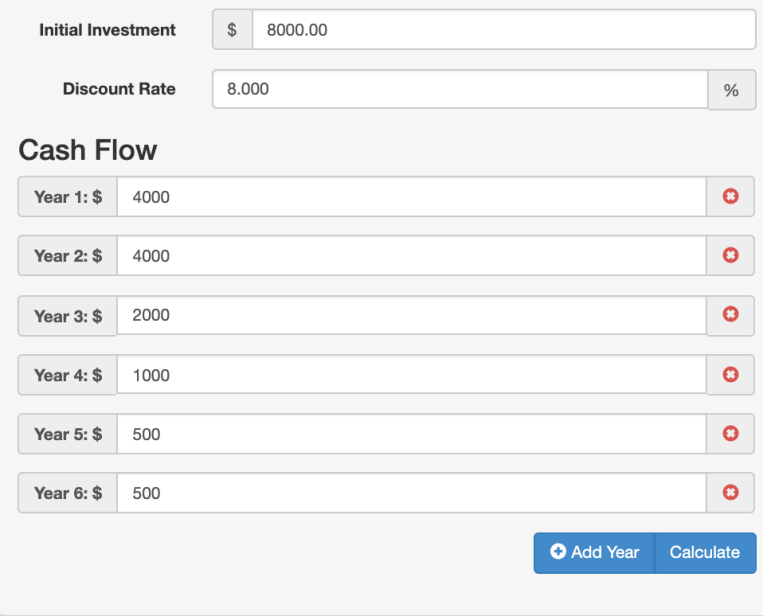
-8,000

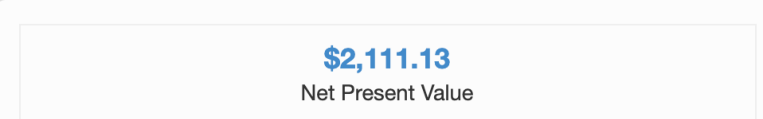
(1 + 0.08)1 ← this could be a 0 instead of a 1, I am not sure.

Which is the best project? Well this depends what percentage you are taking it out on. For Project A it is @ 12%, B @ 10% and C @ 8%.

Name: S. Mert Halici
ID: R00172213
Email: sabri.halici@mycit.ie

So, if we take the initial investment for Project A which is 8,000. Add up the cash flow every year and apply a discount rate of 8%. We got 2,111.13 for the first one. I personally used a website calculator as the lecture notes didn't provide a NPV calculator which is fine. https://www.calculatestuff.com/financial/npv-calculator.





This is for Project A @ 8% discount. To show the workings, I will not do it for every single one as that would take forever.

Name: S. Mert Halici
ID: R00172213
Email: sabri.halici@mycit.ie

Q2.

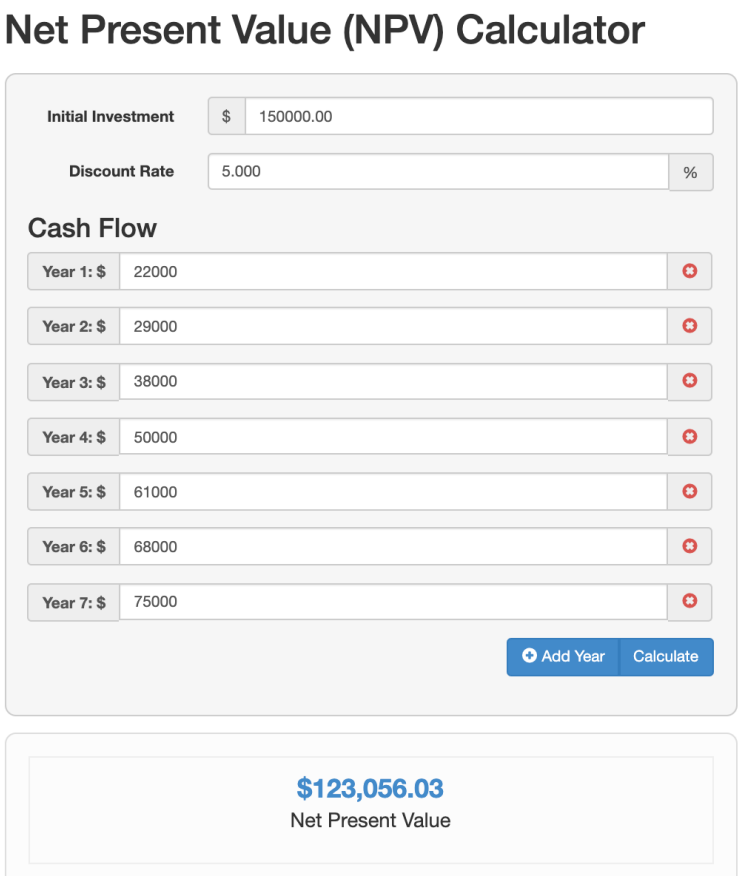
What would the payback-period be for this proposed investment?
So, if we add up the estimated net benefits that is given to us, we get = 343,000 and the initial estimated net operating cost was 150,000 at year 0. And if you add up all the years for the estimated net operating cost is add up to be = 75,000. If you 343,000 – 75,000 = 268,000 then 268,000 – 150,000 = 118,000, so the payback period would be around 1 or 2 years.

What is the return on investment (ROI) for this proposed investment?

ROI = average annual profit
---------- x100
Total investment

49,000 (343,000 / 7)
--------- x 100 = **21.8** (I am not 100% sure this is correct or if I did it correctly).
225,000 (150,000 + 75,000)

What is the net present value (NPV) of this proposed investment, if the current discount rate is 5%?



= 123,056.03

Name: S. Mert Halici
ID: R00172213
Email: sabri.halici@mycit.ie