Høyskolen i Østfold, **Avdeling for Informasjonsteknologi, Remmen, 1757 Halden.**

HOVEDPROSJEKT, VÅR 2007.

Returneres pr. epost til: Erling.P.Strand@hiof.no
Ang. formål, krav etc. se http://www.ia.hiof.no/hovedp/oppdragsgiver.htm

Prosjekttittel:	Option Calculator
Organisasjon/Bedrift:	HIØ v/Ky
Kontaktperson(er):	
Prosjektbeskrivelse:	Buy and sell stock are very risky because you do not know what the market prices are in the future. In finance, investors always would like to control the financial risk, reducing or eliminating the whole risk. It is the objective of options, since buyers of options can never lose more than the price they pay for them. An option is a contract that gives buyers the right (but not the obligation) to buy or sell the underlying asset at a fixed price (the strike price) on or before a given date (the expiration date). However, trading options without an option caculator can make you lose your money, no one likes to overpay for an option. The value of an option is determined by a number of variables relating to the underlying asset and financial markets: Current value of the underlying asset, variance in value of the underlying asset, dividends paid on the underlying asset, strike price of option, time to expiration on option, riskless interest rate corresponding to life of option.. There are different types of options: American, European, Asian options, ... In this project, we would like to build an option calculator to calculate the price of options based on several models like the binomial model and the Black-Scholes model. Energy trading system of Navita AS (Halden) works with this problem.
Hva gjør denne oppgaven nyttig/interessant?	
Evt. krav til studentenes forkunnskaper:	Programming
Evt. krav til spesielt utstyr (hardware/software):	
Annet:	