# Project proposal meta text

1) **A brief description of the topic and where it fits into the field**

This has to come from two angles; the computing framework angle and the automated framework angle

For brevity I will start with small introduction on computational finance

I will write about automated trading with in the financial industry

I will talk about the continuing growth of the automated trading industry

I will give an introduction about retail trading and the wider public access to the markets. This could then be referenced as a 'target audience for the framework'

I will talk about both the fundamental and technical analysis.

I will then talk about this in the context of foreign exchange and equities. Noting that automated trading is applied in a huge spectrum of markets but focusing on these two.

I will follow this with an explanation on how floating exchange rates were introduced and give a short back ground on the London stock exchange (not the history of stock markets)

2) An account of the current work/applied technology in this area

The three topics I will focus on are: High frequency trading (HFT), MAN Groups AHL fund and direct market access (DMA)

I will talk about high frequency trading and the regulation surrounding it. -- Rahul Savani's has done some wok on this

I will talk about one of the most successful algorithmic trading funds AHL and also mention its recent poof performance.

I will talk about direct market access (DMA) link it into HFT and how it can be combined with algorithmic trading.

I will talk about the efficient market hypothesis and its strong, medium and week forms and how all of the above mentioned technologies aim to disprove this in their own way.

3) **The identification of the question you would like to answer/the practical problem you would like to solve**

I will explain how the problem is broken down into two parts, the framework (accessing the market) and the trading strategy (participating in the market).

I will take about the how the frame work will solve the practical problem of 1) allowing users to test trading strategies via historical csv files and 2) allowing users to test strategies via a market data feeds.

I will take about the end goal of having a framework that is open to be built upon.

I will talk about the trading strategy that I intend to implement, how it will use technical analysis and what academic work it will be based off. I will also explain how I will test it against the null hypothesis of market efficiency

## 4) A suggested means of answering this question/solving them problem

As with section three I will split this into two parts; how I will solve the problem of creating the framework and how I will create a trading strategy.

I will explain the main components of the framework; at the moment these are: pricing parser, web server, trading engine, web-display.

I will talk about the different phases of the framework development; first phase working with CSV, second phase working with market data and the third phase of working with full trading API.

I will explain the different phase of the web display and how it will start with being information only displaying the results.

I will explain the sources of the market data and how it will allow for real time testing of the trading strategy.

I will give a detailed explanation of the (user guide?) of the API.

I will follow this up by giving an example to API being used for a trading strategy.