Project proposal meta text

1) A brief description of the topic and where it fits into the field – in this section I will:

- Introduce the two topics of computing framework and automated framework
- Start with small introduction on computational finance
- Write about automated trading and its role in the financial industry
  - Including retail trading
- Talk about both the fundamental and technical analysis.
- Introduce the foreign exchange and equities markets. 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

- Focus on three topics: High frequency trading (HFT), MAN Groups AHL fund and direct market access (DMA)
- High frequency trading and the regulation surrounding it. -- Rahul Savani's has done some wok on this
- The success and and recent poor performance of the AHL fund
- Direct market access (DMA) and link it into HFT and how it can be combined with algorithmic trading.
- 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

- Break down the problem into two parts: the framework (accessing the market) and the trading strategy (participating in the market).
- 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.
- The end goal of having a framework that is open to be built upon.
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- Mention portfolios in trading strategies

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

- First talk about the framework and then the trading algorithm

- Describe the different parts of the framework: pricing parser, web server, trading engine, web-display.
- Implementation options in regards to languages
- Mention the market data sources -- how it solves the data problem
- The trading strategy that I intend to implement, how it will use technical analysis and what academic work it will be based off
    - Explain how I will test it against the null hypothesis of market efficiency