**USE CASE SPECIFICATIONS – Using E-FAST**

**Brief description**

This use case guides a financial analyst in using E-FAST, best application for calculating EMA & SMA, faster than ever, with accuracy and with almost no errors on decimal points. The financial analyst can bring his own file with data over his stock/stocks or he can work with data offered by Yahoo finance. The application’s GUI will help the financial analyst obtain, in simple steps, the averages.

**Actors**

1. Primary actor – financial analyst.
2. Secondary actor – investment advisors, brokerage firms, etc.

**Flow of events**

1. **Basic flow** 
   1. BUILDING AND RUNNING THE APPLICATION – this use case starts when the financial analyst (investment advisor or brokerage firm) accesses the E-FAST application.
   2. UPLOADING A FILE – the financial analyst will upload a file that contains information on how the stock has evolved.
   3. SELECT METHOD USED – the system retrieves the methods that can be performed on data. The financial analyst must choose one of the two Moving Averages: EMA or SMA or he can choose to use them together.
   4. SELECT WHETER OR NOT AN ANALYSIS WILL ALSO BE GENERATED – E-FAST can plot the resulting average onto a chart in order to allow traders to look at smoothed data. The financial analyst will be able to choose if, along with the results, he wants a chart that will make his data easier to represent. Otherwise, the result will be putted in a file and no chart of any type will be generated.
   5. CHOOSE COMPUTING TYPE – to offer a high standard of execution speed, E-FAST is using a grid system to distribute operations. If in lack of time or if he just wants to generate results as fast as possible, the financial analyst can choose to perform his tasks faster by using grid computing but a normal execution is also possible.
   6. STARTS EXECUTION – when the financial analyst has chosen all the parameters for his execution, he can hit the ‘starts execution’ button and wait for the resulting averages.

**2. Alternate flows**

2.1 INSPECT AND MANAGE RAW – the financial analyst has the possibility to inspect the data that has not been subjected to processing or any other manipulation yet. When choosing a file, the data from that file is parsed into the database and the financial analyst can look it over at any time.

2.2 VIEW EXECUTION STATUS/SERVICES – while the application is working on generating results, it will also offer information regarding the status of the execution, to help the financial analyst forecast how long he will have to wait until his results will be ready.

2.3 GENERATE ANALYSIS – analysis can be generated without going throw all the steps of selecting parameters. If you have EMA & SMA already calculated, you can upload that file and the system will generate charts at the drop of a hat. If you don’t have the averages calculated, you will have to calculate at least SMA to be able to have an analysis of any type.