

# Course Project Part 1

## Section B: Introduction to technical analysis

Criteria	Ratings	Pts
<b>Data Acquisition and Indicator Computation</b> a) Retrieves S&P 500 stock data using <code>yfinance</code> b) Correctly computes MA50 and MA200 for all stocks	<b>15 pts – Excellent</b> All data retrieved without error and moving averages computed accurately for full stock set. <b>12 pts – Competent</b> Data and indicators mostly correct, with minor issues or incomplete stock coverage. <b>9 pts – Basic</b> Significant errors or missing components in data or moving averages. <b>0 pts – Insufficient</b> No functional data retrieval or indicator calculation.	15 pts
<b>Signal Detection and Filtering</b> a) Golden and Death Crosses are correctly detected b) Focused on crosses within the last 14 days c) Results stored and filtered into a usable format	<b>15 pts – Excellent</b> Cross signals accurately detected and recent ones correctly isolated and stored. <b>12 pts – Competent</b> Crosses mostly correct with partial filtering or structuring issues. <b>9 pts – Basic</b> Cross detection logic flawed or recent signal filter not functional. <b>0 pts – Insufficient</b> Signals not detected or logic missing entirely.	15 pts
<b>Visualization and Volatility Analysis</b> a) Golden and Death Cross stocks visualized b) Volatility computed and contextualized in the plot c) Proper date shading and labeling	<b>10 pts – Excellent</b> Plots are complete, labeled, include volatility, and clearly highlight signals. <b>8 pts – Competent</b> Plots are generated but lack polish or omit volatility/shading. <b>6 pts – Basic</b> Plots are unclear or missing critical elements (e.g., titles, cross window). <b>0 pts – Insufficient</b> No plots produced or irrelevant content.	10 pts

<p><b>Reflection and Critical Analysis</b></p> <p>a) Answers all reflection questions on technical signals, volatility, and signal quality</p> <p>b) Provides backtesting rationale and strategic evaluation</p>	<p><b>10 pts – Excellent</b> All responses are thoughtful, technically sound, and show real-world insight.</p> <p><b>8 pts – Competent</b> Most questions answered with reasonable depth and technical logic.</p> <p><b>6 pts – Basic</b> Answers are superficial or incomplete.</p> <p><b>0 pts – Insufficient</b> Reflection missing or lacks relevance and understanding.</p>	<p>10 pts</p>
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