

**Three Bar Pattern
Use Cases**

Version 1.6

Three Bar Pattern	Version: 1.7
Use Cases	Date: 04/10/22
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Revision History

Date	Version	Description	Author
11/18/2021	1.6	Cleaning it up and adding changes from Version 1.5 document	Kyle Conte
4/10/2022	1.7	Working on it once all features are done	David Greenwell

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Use Cases

Use Case List

Primary Actor	Use Cases
User	UC1: Choose the ticker filters UC2: Change algorithm parameters UC3: Delete ticker UC4: Import CSV UC5: Display Stocks That Will be Put Through Algorithm UC6: Run algorithm on selected stocks
System	UC1: Three Bar Pattern on Real Time Scanner

Use Case 1: Choose the stock ticker

UC ID and Name:	UC-1: Choose the stock ticker		
Created By:	Team	Date Created:	April 10, 2022
Primary Actor:	User	Secondary Actors:	N/A
Trigger:	User searches stock ticker to analyze		
Description:	A user navigates to the Website, chooses what stock he/she wants the program to watch, the website then shows the candlestick graph for the stock chosen and screen for patterns.		
Preconditions:	PRE-1. User navigates to the Website through any device.		
Postconditions:	POST-1. Stock previews basic stock information		
Main Success Scenario:	<ol style="list-style-type: none"> 1. User chooses specific stock to analyze (see 1a, 1b) 2. System Displays stock with basic stock information. 3. Flat file with found three bar patterns output for historical 4. Ticker is added to watch list for real time scanning 		
Extensions:	<p>1a. User search stock ticker does not exist</p> <p>2a1. System notifies user that stock is not does not exist Use case terminated</p> <p>1b. User search returns multiple stock tickers</p> <p>2b1. System puts closest match at top 2b2. System displays other similar matches below the exact match</p>		
Priority:	High		
Frequency of Use:	Every time a new user enters the website or an existing user wants to look at a different stock. Peak usage load for this use case is between the normal session of the general stock market.		
Business Rules:	TBD		
Other Information:	<ol style="list-style-type: none"> 1. User will use a search bar to choose stock ticker 2. If the system does not have stock data on stock specified, use case terminates. Refer to extensions 		
Assumptions:	Assume that users want to look at different stocks occasionally.		

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Use Case 2: Change Algorithm Parameters

UC ID and Name:	UC-2: Change Algorithm parameters		
Created By:	Team	Date Created:	April 10, 2022
Primary Actor:	User	Secondary Actors:	N/A
Trigger:	User selects filters and settings button.		
Description:	User adjusts parameters to change algorithm output to view different models.		
Preconditions:	PRE-1. User has selected a ticker to analyze		
Postconditions:	POST-1. Algorithm settings have been changed for specific model		
Main Success Scenario:	1. User inputs new settings for algorithm 2. User clicks apply to solidify the changes.		
Extensions:	1a. User inputs invalid settings(i.e. wrong data type or out of range) 2a1. User is notified of invalid settings and is prompted to input again.		
Priority:	Medium		
Frequency of Use:	Different by user preference.		
Business Rules:	TBD		
Other Information:	1. Valid settings are displayed as default values		
Assumptions:	User wants to see the data in a different perspective.		

Use Case 3: Delete ticker

UC ID and Name:	UC-3: Delete ticker		
Created By:	Team	Date Created:	April 10, 2022
Primary Actor:	User	Secondary Actors:	N/A
Trigger:	User clicks the delete ticker button		
Description:	User no longer wants a ticker to be displayed on historical or tracked on the real time analysis.		
Preconditions:	PRE-1. At least one ticker is added ticker list		
Postconditions:	POST-1. Stock ticker deleted from list. POST-2. System displays all stocks that haven't been deleted		
Main Success Scenario:	1. User select ticker to delete.		
Extensions:			
Priority:	Medium		
Frequency of Use:	Different by user preference.		
Business Rules:	TBD		
Other Information:	1. Tickers that have been deleted can still be added back		
Assumptions:	User wants to see less historical data or track one less ticker.		

Use Case 4: Import CSV

UC ID and Name:	UC-4: Import CSV		
Created By:	Team	Date Created:	April 10, 2022
Primary Actor:	User	Secondary Actors:	N/A

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Trigger:	User clicks the import CSV button
Description:	User wants to import a CSV with other specific stock data
Preconditions:	PRE-1. User has a CSV with stock information PRE-2. The CSV is in correct format
Postconditions:	POST-1. CSV is displayed on front end for confirmation before being put through the algorithm.
Main Success Scenario:	1. CSV is added to tickers that will be put through the algorithm.
Extensions:	1a. CSV has incorrect format 2a1. System will notify user of incorrect format and prompt to import again
Priority:	Low
Frequency of Use:	Different by user preference.
Business Rules:	TBD
Other Information:	Only used if a stock is not added through our data crawler
Assumptions:	User wants to track a stock that is not included in our Alpaca API

Use Case 5: Display Stocks That Will be Put Through Algorithm

UC ID and Name:	UC-5: Display stocks that will be put through algorithm		
Created By:	Team	Date Created:	April 10, 2022
Primary Actor:	User	Secondary Actors:	N/A
Trigger:	User has clicked the fetch data button		
Description:	User wants to check what stock will be put through the algorithm before execution		
Preconditions:	PRE-1. User has chosen stocks		
Postconditions:	POST-1. System displays stocks that have been chosen.		
Main Success Scenario:	1. User will ask to fetch data and stocks will be displayed		
Extensions:			
Priority:	Medium		
Frequency of Use:	Different by user preference.		
Business Rules:	TBD		
Other Information:	User may want to delete some tickers after this use case		
Assumptions:	User does not know which stock will be put through the algorithm		

Use Case 6: Run Algorithm on Selected Stocks

UC ID and Name:	UC-6: Run algorithm on selected stocks		
Created By:	Team	Date Created:	April 10, 2022
Primary Actor:	User	Secondary Actors:	N/A
Trigger:	User has clicked the run settings button under the filters and setting tab.		
Description:	User would like to run the algorithm on selected stocks.		
Preconditions:	PRE-1. User has chosen stocks they wish to track PRE-2. User has entered valid algorithm parameters or applied default values		
Postconditions:	POST-1. User is given output based on specified file type		
Main Success Scenario:	1. User will click the run setting button and the algorithm runs without problems		
Extensions:	1a. Algorithm Fails 2a1. System will notify user of reason for fail.		

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Priority:	High
Frequency of Use:	Different by user preference.
Business Rules:	TBD
Other Information:	Algorithm might not return any three bar patterns if algorithm parameters make a model that is too specific
Assumptions:	User wants to see three bar patterns found

Use Case 1(System): Three Bar Pattern Found on Real-Time Scanner

UC ID and Name:	UC-1(System): Three Bar Pattern Found on Real-Time Scanner		
Created By:	Team	Date Created:	April 10, 2022
Primary Actor:	System	Secondary Actors:	N/A
Trigger:	System has found a three bar pattern in real time.		
Description:	System has found a three bar pattern on a stock that is being tracked.		
Preconditions:	PRE-1. Stock is being tracked PRE-2. Real time scanner is running		
Postconditions:	POST-1. User is notified of the found pattern		
Main Success Scenario:	1. Three bar pattern is found by real time scanner 2. User is notified of the three bar pattern found and three bar pattern is displayed		
Extensions:	1a. Notification push failed 2a1. System will display on the website that a notification push has failed.		
Priority:	High		
Frequency of Use:	Different by user preference.		
Business Rules:	TBD		
Other Information:	Users may need to choose what type of notifications they wants to receive.		
Assumptions:	User wants to receive notifications on patterns found.		