

Sprint 4 Plan

Product Name: Backtesting Engine, Team Name: Simple Strategies

Sprint Completion Date: 12/2/25, Revision Number: 1, Revision date: 11/19/25

Goal: Deliver a functional and fully deployable MVP of the Backtesting Engine by completing all essential capabilities such as strategy storage, platform deployment, and possibly password reset functionality, ensuring that users can reliably create, save, analyze, and learn from stock strategies within a stable and accessible platform. Stretch goals include implementing additional enhancements that improve usability, user experience, and educational value such as additional levels, Monte Carlo simulations, Stock News, etc.

User stories:

- As a user, I want a convenient and accessible platform to access simple strategies on
 - Deploy frontend on vercel (3 hours)
 - Deploy backend on railway (3 hours)
- As a user, I want to be able to store my strategies so I can conveniently access them later
 - Set up database to store use strategies (1 hour)
 - Write functions to be able to communicate with the database (send strategies to the database, pull strategies from the database) (2 hours)
 - Implement the UI on the create page for the user to be able to save, select, and see their strategies (4 hours)
- As a user, I want to be able to level up my understanding of stock strategies to have better financial literacy through more complex curriculums and lessons.
 - Writing content for level 3 and adding it to the lessons database (2 hours)
 - Writing content for level 4 and adding it to the lessons database (2 hours)
 - Connecting APIs for the lessons' components (1 hour)
- As a user, I want to see related news articles about the stocks and strategies I'm viewing so that I can understand the current market context.
 - Access recent articles in yFinance for given tickers (2 hours)
 - Integrate the news headlines/links/articles into create page or some other places (4 hours)
- As a user, if I want the ability to reset my password in case I forget it (6 hours)
 - Send a reset email (4 hours)
 - Create a new password and update the database (2 hours)
- As a user, I want to run Monte Carlo simulations on my modified strategies so that I can assess their robustness and variability.
 - Set up Monte Carlo simulation API (8 hours)

- Integrate Monte Carlo simulations into create page (6 hours)

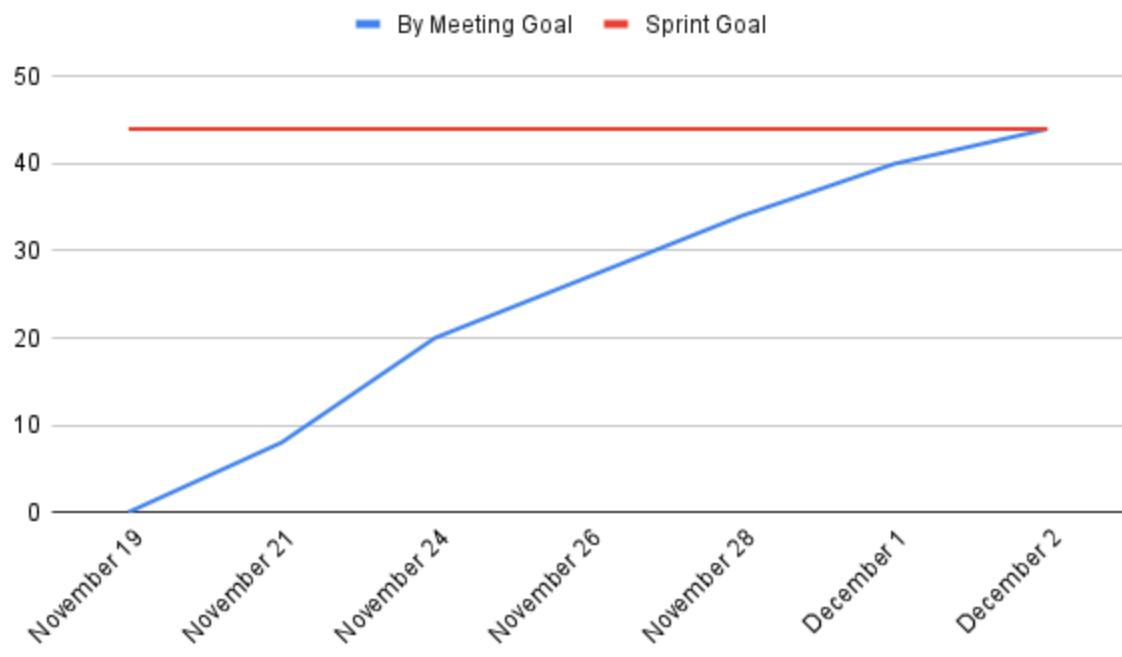
Team Roles:

- David Garcia : PO
- Nathan Nham: Scrum Master, Database Manager
- Nishan Lama: UI/UX designer, Frontend developer
- Sanjana Manikandan: UI/UX designer, Frontend developer
- Rohan Shukla: Frontend developer

Initial Task Assignment:

- Nathan:
 - As a user, I want to be able to store my strategies so I can conveniently access them later
- David:
 - As a user, I want to be able to store my strategies so I can conveniently access them later
 - As a user, I want a convenient and accessible platform to access simple strategies on
- Rohan:
 - As a user, I want to be able to level up my understanding of stock strategies to have better financial literacy through more complex curriculums and lessons.
- Nishan:
 - As a user, if I want the ability to reset my password in case I forget it
 - As a user, I want to be able to level up my understanding of stock strategies to have better financial literacy through more complex curriculums and lessons.
- Sanjana:
 - As a user, I want to be able to level up my understanding of stock strategies to have better financial literacy through more complex curriculums and lessons.

Initial Burnup Chart:



Initial Scrum board:

Sprint 4				
User Stories 6	To do 14	In progress 0	In Review 0	Done 0
<p>As a user, I want a convenient and accessible platform to access simple strategies on</p> <p>As a user, I want to be able to store my strategies so I can conveniently access them later</p> <p>As a user, I want to be able to level up my understanding of stock strategies to have better financial literacy through more complex curriculums and lessons.</p> <p>As a user, I want to see related news articles about the stocks and strategies I'm viewing so that I can understand the current market context.</p> <p>As a user, if I want the ability to reset my password in case I forget it (6 hours)</p> <p>As a user, I want to run Monte Carlo simulations on my modified strategies so that I can assess their robustness and variability.</p>	<p>Deploy frontend on vercel (3 hours)</p> <p>Deploy backend on railway (3 hours)</p> <p>Set up database to store user strategies (1 hour)</p> <p>Write functions to be able to communicate with the database (send strategies to the database, pull strategies from the database) (2 hours)</p> <p>Implement the UI on the create page for the user to be able to save, select, and see their strategies (4 hours)</p> <p>Writing content for level 3 and adding it to the lessons database (2 hours)</p> <p>Writing content for level 4 and adding it to the lessons database (2 hours)</p> <p>Connecting APIs for the lessons' components (1 hour)</p> <p>Access recent articles in yFinance for given tickers (2 hours)</p> <p>Integrate the news headlines/links/articles into create page or some other places (4 hours)</p> <p>Send a reset email (4 hours)</p> <p>Create a new password and update the database (2 hours)</p> <p>Set up Monte Carlo simulation API (8 hours)</p> <p>Integrate Monte Carlo simulations into create page (6 hours)</p>	+	+	+

Scrum Meeting Times:

- Mondays, Wednesdays, and Fridays from 8:45 to 9:00 pm
- TA Meeting Time: Tuesdays from 2:45 to 3:30 p.m.
- Hybrid Meeting Time: Wednesdays 2:30 - 3:30 pm

Backlog:

-N/A