

## **Dobby Random – Stock simulator**

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This game allows users to practice stock purchases in a safe environment and understand the concept of randomness in the market. It's designed as a game where a user competes with a bot whose decisions are based on random number generators. The different packages and functions

1. Stock\_Game package
  - a. This stores global parameters about available stock.
  - b. This starts the game and calls User\_Bot, user gets control to play.
  - c. It computes current price using base price and random variability.
  - d. It evaluates if user can buy/continue.
2. User\_Bot sub-package
  - a. It initializes user and bot parameters and provides an initial balance of 10000\$.
  - b. It accepts inputs from user and generates bot's inputs (random) and calls Stock\_Game package for pricing and validation.
  - c. It manages available balance for each user and processes buy request.
  - d. This stores information about user's purchase decisions and balance.
  - e. It ends game once user exhausts this limit and calls Buy function to decide winner.

Appendix:

