User makes investment (Buy stock)
1. **User logs in**
2. User provides stock symbol
3. System validates symbol
4. System provides stock info
5. User chooses to invest
6. System asks user for amount of shares they would like to purchase
7. System processes investment
8. System returns success / failure status

Extensions
3a: System is invalid, return to MSS step 2
6a: User provides invalid number
     .1: System asks user for a valid number
6b: User may cancel investment, return to MSS
7a: Insufficient funds; System notifies user. Return to MSS step 7

User sells stock
1. **User logs in**
2. User submits symbol to sell shares of
3. System provides current stock prices
4. System prompts user to enter a share amount
5. User submits share amount
6. System returns success / failure status

Extensions
5a: User enters an invalid amount
     .1: System prompts user to try again
     .2: User may cancel investment

System fetches current stock prices
1. **System triggers periodic data update**
2. System requests current prices for stored stocks
3. System receives response
4. System updates cache with new data
5. System provides relevant new data to active users
     ### Extensions
     3a: Bad response; Try again (MSS 2)

System Auto-Buys Stocks
1. **Auto-buy price threshold reached**

2. System attempts to purchase amount of shares at specified price
3. System returns success / failure status

System Auto-Sells Stocks
1. **Auto-sell price threshold reached**
2. System attempts to sell amount of shares at specified price
3. System provides success / failure status

System provides Popular Stocks
1. System sorts stocks by performance in market
2. System caches which stocks are best performing

User checks transaction history
1. User requests full transaction history
2. System provides data

User resets transaction history
1. System prompts user to confirm
2. System retrieves user data
3. System removes transaction history from user data
4. System saves updated user data
5. System provides updated data to user

User follows / watches a stock
1. **User is logged in**
2. User submits stock symbol they want to follow
3. System validates stock symbol
4. System marks user's account as following stock

User creates account
1. User provides email
2. System validates email
3. User provides password
4. System validates password
5. System encrypts credentials
6. System creates new account entry in database with provided credentials
7. System logs user in with new credentials

Extensions
2a: System detects that email is invalid
    .1: System notifies user that an invalid email was provided
3a: System detects invalid password
    .1: System notifies user that an invalid password was provided

User updates profile picture
1. **User logs in**
2. User uploads new profile picture from local storage
3. System checks that profile picture meets requirements
4. System returns successful upload
5. System stores profile picture to database

Extensions
3a: Picture is incorrectly formatted

     .1: System returns error specifying allowed supported filetype

3b: Picture size is too big/small

     .1: System returns error specifying allowed pixel size of picture

User updates bio:
1. **User logs in**
2. User submits new bio
3. System validates bio
4. System stores new bio in database

User logs in
1. User provides login credentials
2. System validates username/password against existing login credentials
3. System notifies user of successful login attempt

Extensions
1a: User credentials do not exist in database

     .1: System returns no account associated with those credentials

2a: User credentials do not match those in database

     .1: System returns incorrect username/password

User forgot password
1. System prompts user to provide an email for the account
2. System verifies that there is an account associated with email
3. System prompts user for new password
4. User provides new password
5. System validates password
6. System stores new password

System sends user push notification
1. ** Event triggers notification system **
2. System checks preferred contact method of user

3. System provides automated message to user through contact method

System Validates Symbol
1. System receives symbol
2. System checks for symbol in cache

Extensions
        2a: Symbol exists in cache
                .1 System returns stock information
        2b: Symbol does not exist in cache
                .1 System searches external sources for symbol existence
                        .1a: Symbol is found
                                .1 System caches stock information
                                .2 System returns stock information
                        .2a: Symbol is not found
                                .1 System returns error