

## 1. What's the main purpose of this product:

- a. Generate a first-take report on earnings call summary about a specific company for internal use
  - i. Verifiability: Display source document (Need UI/UX design ideas)
- b. Allow follow-up questions on the generated first-take report document

## 2. Context: what's the content of the report?

- a. Action: Input company ticker, generate report document
- b. Generate three sections:
  - i. Summary of: 10-Q/10-K depending on quarter, transcript (earnings & follow-up), investor deck
  - ii. Financial performance and risk. Source from:
    - 1. Income statement, balance sheet, cash flow
    - 2. 10K/10-Q, earnings call
  - iii. Estimate EPS, revenue
    - 1. Find required input parameters
    - 2. Call self-defined function tools with explicit input parameters and formula for computation

## 3. What follow-up question will user ask and how do we plan to respond?

- a. Clarify or modify certain points in the report. (*E.g. Walmart is affected by US-China trade war, revenue lower than expected.* )
  - i. Challenge generated analysis.
  - ii. Expectation:
    - 1. Explain the source of made statement
    - 2. Modify in place to elaborate upon made statement
    - 3. Change made statement upon request
- b. Explain estimate (e.g. EPS, revenue, assumptions)
  - i. Trace back to which functions called and which input parameters used
  - ii. Explain the formula used for calculation, and display where the input parameters were found in source document

## 4. Important considerations:

- a. Security & privacy
- b. Token/time efficiency (e.g. should we cache initial report generated for certain company? This would incur higher storage cost as a tradeoff)
- c. Scalability (serving ~100s users)
- d. Complexity of future maintenance & version update (e.g. LangChain/LangGraph may be good in some ways, but would they have another drastic version change that affects all our code?)