

Objective: Begin incremental prototype development and organize code to use model-view-controller pattern. Create component & connector and allocation views for the TradeNet system. Setup and demonstrate required REST APIs.

Overview: Milestone #2 consists of both implementation and design work. Implementation will include creating code that represents the 'model' (as in MVC) for your system. This code should include all objects that make up the model and API calls using the required REST APIs. You will also code all API connections to build the model code (e.g., twitter API calls to build the Tweet objects). Finally #2 requires the design of 2 component and connector views and a deployment view. This milestone focuses on the model development and API usage.

Assignment (Consider the TradeNet Requirements Overview and Scenario Description):

1. Create 2 separate Component & Connector Views that address stakeholder concerns (for full system). Provide a description / overview and rationale for choosing the views.
2. Create a Deployment view for the TradeNet system.
3. Implement all external API connections to demonstrate use. Create separate API objects for each of the 4 external API connections required. Setup either a command line or simple GUI application to demonstrate their use.
 - a. Twitter API to search for tweets related to a ticker symbol (e.g., \$APPL, \$MSFT - stock tickers include '\$' character before ticker symbol on Twitter)
 - b. Validate email address using mailboxlayer.com - submit email address and return validation confirmation
 - c. Tradier API - developer.tradier.com - Get current price, change, percent change, volume for provided symbol
 - d. Get financial news headlines (4+) using preferred news source
4. Review your object / class diagram for the initial prototype (M#1). List all classes that make up the model in the MVC representation for your system. Implement model classes in preferred programming language to include attributes / properties (with types and default values if any) and methods (method signature only required i.e., method name, return type, parameters).

Guidelines & Notes

- See Milestone #1

Submission

- All submissions will be made to your Team Space in Confluence - soma.cse.msstate.edu:8090
- Create GitHub repo (public or private [invite byron.w@ieee.org /]) for API code

Grading:

- Appropriateness of views (traceability to requirements, consistency between views, key, and rationale)
- Due - Nov 17th - or sooner - Final Milestone #3 Delivered after Milestone #2 Submission (email if submitted before due date)