rallyAI

CSE 115A, Fall 2019
Kyle O'Brien, Nixon Duong, Joseph Nguyen, Matthew Wirtz, Sean O'Hearn

Sprint 3 Plan

rallyAI, 11/4/2019 - Release 1 - Revision 1 - Revision Date: 11/4/2019

Goal:

Our team's goal is to begin to integrate the separate components into one usable product. Our API will use the scraped data, the model will be exported to the API, and it will begin to give users' predictions.

Task listing, organized by user story:

User Story 1: As a developer, I want to implement continuous integration to detect errors before the project is deployed.

Tasks:

1. Write a unit test file in JESTE **(1 hours)**
2. Create an Azure pipeline YAML configuration. **(1 hours)**

Total: 2 hours

User Story 2: As a developer, I want a complete ML predictive model to be integrated with our API so users can begin to query predictions.

Tasks:

1. Have a working model done **(5 hours)**
2. Export model architecture (json) and weights (h5) **(3 hours)**
3. Import model into NodeJS using KerasJS **(3 hours)**
4. Write functions for the user to use to access data **(5 hours)**
5. Integrate with the API **(5 hours)**

Total: 21 hours

User Story 3: As a developer, I want to build my data set with scrapers so I can collect data.

Tasks:

1. Containerize Web Scraper **(3 hour)**

Total: 3 hours

User Story 4: As a developer, I want to start providing basic functionality to our API so the user can interact with it.

Tasks:

1. Design the GraphQL Schema **(5 hours)**
2. Write mock database calls to JSON **(1 hour)**
3. Implement stock symbol query argument **(5 hours)**

4. Query data from PostgreSQL **(2 hours)**

Total: 13 hours

User Story 5: As a developer, I want to use caching so the APIs latency is optimized.
Tasks:
1. Follow Redis tutorial to cache requests for a sample API **(3 hours)**
2. Research Redis caching for APIS **(2 hours)**
3. Look into caching middleware for API **(2 hours)**
4. Add Redis image to Docker-compose deployment **(1 hours)**
5. Research Azure Redis offerings **(0.5 hours)**

Total: 8.5 hours

Team Roles:
Kyle O'Brien: Team Lead, Developer
Nixon Duong: Data Scientist
Mathew Wirtz: Data Scientist
Sean O'Hearn: Developer, Scrum Master
Joseph Nguyen: Developer

Initial Task Assignment:
Kyle O'Brien: user story 1, tasks 1, 2; user story 4, task 3; user story 5, tasks 1-5
Nixon Duong: user story 2; tasks 4, 5
Mathew Wirtz: user story 2; tasks 1, 2, 3
Sean O'Hearn: user story 3; tasks 1
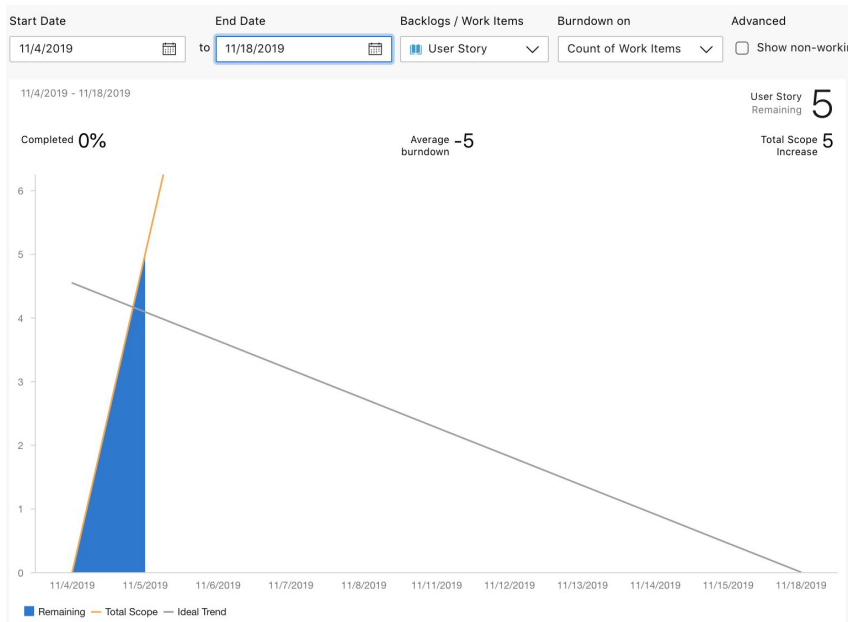**Joseph Nguyen**: user story 4; tasks 1, 2, 4

Scrum Times:
Monday: 2:30-3:00pm (with our TA)
Wednesday: 9:30-10:00am
Friday: 9:30-10:00am

Initial Burnup Chart:

Start Date	End Date	Backlogs / Work Items	Burndown on	Advanced
11/4/2019	to 11/18/2019	User Story	Count of Work Items	Show non-worki...

11/4/2019 - 11/18/2019

Completed 0%

Average ~5
burndown

User Story 5
Remaining

Total Scope 5
Increase

■ Remaining — Total Scope — Ideal Trend

Initial SCRUM Board

Link:https://dev.azure.com/kyledevinobrien/rallyAI/_sprints/taskboard/rallyAI%20Team/rallyAI/Sprint%203