

Problem Set:

The SAFe describes goals and plans at several levels of abstraction:

- Investment themes.
- Epics.
- Features.
- Stories.
- Tasks

Describe examples of each of these for a company like Driverless Software that produces software and services for self-driving cars. That is, start with a new strategic direction for Driverless Software, a high-level direction that will sustain and grow Driverless Software for the next 2-4 years. Describe the new strategic direction as an Epic and create a strategic plan for delivering that direction. Drill down into that Epic and give specific examples of themes, features, stories, and tasks that might be used in planning and developing software that supports that strategic direction. Specifically, identify the new strategic direction and describe at least 2 software releases to deliver that direction. Then break down those 2 releases into at least 5 user stories for each release and describe at least 1 task for each user story.

Solution:

1. Investment Themes

- a. **Existing Offers** - To save money on storage, go from Infobright Enterprise Edition (IEE) to Infobright Community Edition (ICE).
- b. **New Offers** - Invest in many nodes for a company-wide large data processing cluster.
- c. **Futures** - Investigate Facebook integration and the possibility of conducting aggregations on all data to generate statistics and forecasts for names, genes, and traits.
- d. **Sunset** - discontinue support for the legacy website and old data format because they have become chaotic.

2. Epics

- a. Transfer existing IEE data to ICE.
- b. Enter information into the new database.
- c. Purchase and install mapr cluster nodes.
- d. Display data collection statistics on the website.

3. Features

- a. Develop a new migration software to migrate existing data from IEE to ICE.
- b. Create a separate task that compares the two databases to reduce risk and assure data quality.
- c. Develop a spark task to aggregate all data in the old and new databases and offer simple statistics on the billions of items stored.
- d. Create a new panel/site statistics page.

4. Stories

- a. Create daily batch processes to compare daily data feeds between the two databases.
- b. Transfer data between databases.
- c. Connect aggregated spark output data to the website.
- d. Optimize cluster compression/performance.
- e. Change all applications to submit fresh data to both databases, using a toggle button to gradually turn off the old database.

5. Tasks

- a. Create a new database and program connections.
- b. Read some data from the database.
- c. Transfer data from the legacy database to the new database.
- d. Create a program that compares differences.
- e. Display differences in a pleasant style.