Scenario: Develop an Application (App) to Provide Real-Time Marketing Data

The AHI development team is working to complete all app development deliverables supporting the project. They are using the Scrum methodology.

The team plans to complete development in two Sprints. (Note: Sprint Backlog Lab Solution reference). It identified five user stories, estimated at 20 story points. The team assumed it could complete 10 story points in each Sprint. It budgeted 165 hours for Sprint 1 and 170 hours for Sprint 2. The team estimated 335 hours as the total time for the entire app development and scheduled each Sprint to last 30 days.

The team is new, and the members do not know each other. The group consists of two internal developers and one external development consultant. Cal Hamer is the product owner. Cal understands the needs of the customers well. However, he is new to the Product Owner position. AHI does not have a Scrum Master to support app development. Cary Manning is the designated Scrum Master. Cary is well-versed in predictive project management methods. However, he has no experience in Scrum.

The Sprint 1 User Story was 0004, developed to ensure that all IT hardware, software, and interfaces were installed to support the new app. Cary worked with the team to create an updated Sprint Backlog. He assigned tasks to team members and held a daily one-hour meeting to discuss status. He also developed a change form to manage changes. The team initially developed an IT infrastructure to support 500 internal and 20 million external app users.

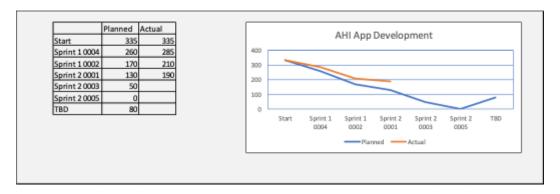
User story 0002 dealt with marketing support requirements. After the Sprint began, Cal worked with marketing staff and updated the user story to reflect the new needs. Cal scheduled a meeting with marketing and the team to discuss the changes.

The first demo for Sprint 1 surprised the stakeholders. They informed the team that the app should support 200 internal and four million external users. That notice came too late. IT invested in more infrastructure than the app realistically needed. Cary determined that issues were impacting the budget and schedule for the app development and used the Sprint 1 retrospective as a forum for a comprehensive root-cause analysis and development of solutions to support Sprint 2.

The team is now in Sprint 2. It encountered issues on user story 0001 and completed only 20 of the planned 40 hours. Some key executives added reporting requirements not included in the original user story.

The team reviewed the project network diagram and found that the total development cycle for the app was 90 days. Cal realized that the five planned user stories in the product backlog did not include updating the original app prototype and developing an initial launch plan. AHI leadership approved the network diagram and a 90-day development cycle. The current roadmap calls for two 60-day Sprints.

Cary and Cal worked together to create a burndown chart for the entire app development phase of the project. Here is the current version:



Exercise: Analyze a Burndown Chart

Keeping the CTRL key pressed, click <u>here</u> to download the **Burndown Chart** Analysis worksheet.

Note: On Mac systems, keep the COMMAND key pressed instead of the CTRL key.

- 2. Open the **Burndown Chart Analysis** worksheet and respond to the three questions listed in it.
- 3. Save your Burndown Chart Analysis document with a meaningful name and as a PDF, such as **AHI Burndown Analysis**.

Use <u>these directions</u> to save a Word document as a PDF if you do not know how already. You will need to upload a PDF for your final project.