Agile Software Development

1 Week

Lesson Overview

The Design Sprints process that the students have followed is a form of Agile Software Development. The most common Agile process used in industry is Scrum, which is very similar to Design Sprints. Design Sprints are used for design, Scrum is used for the coding and development of software. This week students learn what Scrum is, but will only use it superficially in their development. Also this week the teams meet with their mentors to show them their prototype and get their mentor's feedback.

View: Detailed 2-Day Lesson Plan

Learning Objectives

- Define SCRUM, Backlog, Sprint, SCRUM Meeting, Backlog Refinement Meeting, Sprint Planning Meeting, Sprint Review Meeting
- Explain the roles of Product Owner, Scrum Master, Development Team, Stakeholders

Lesson Material



Watch the following videos (also embedded in the activity guide):

• <u>SCRUM</u> [17:00 min]

Student Assignments



Agile Software Development Activity
Guide



Student Mentor Prep Questions: Phase 3 Implementation

Teacher Resources



Agile Software Development Answer
Kev



<u>Industry Mentor Guide: Phase 3</u> Implementation



Notes from the Field

Detailed 2-Day Lesson Plan

Day 1: Agile Software Development

Overview [5 minutes]. Explain to students that another approach to software development that can be used with *Design Sprints* that has been presented by the Google developers so far, is *Agile Software Development*. It has similar ideas of Backlog, priorities "cards", and Sprints, but is more focused on building final products. There is overlap between Design Sprints and the SCRUM agile process shown in today's lesson. We are learning about SCRUM and Agile because it is very widely used, but we won't be practicing it in our project.

We do [45minutes]. Students work in pairs with a partner from their team. They watch the video in the SCRUM Agile Software Development Activity Guide and answer prompts. They get as far as they can, and then do the rest for homework.

You do [Homework]. They finish the Agile Software Development Activity Guide.

Day 2: Mentor Meeting

Mentor Meeting: Implementation [50minutes]. See the Teacher Resources to the right for what to do/expect in the Mentor meeting.