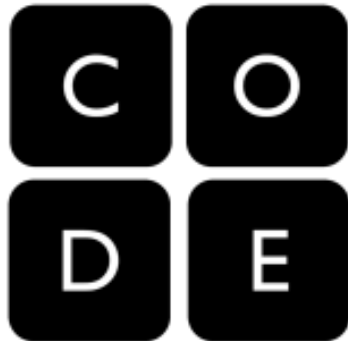
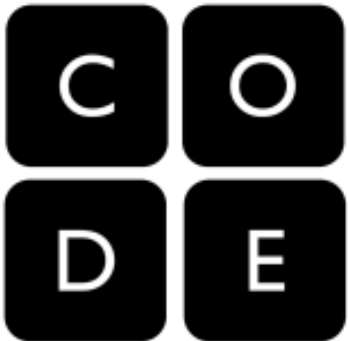


Rapid Research Data Innovations



- [Data Innovation One-Pager](#)
- [Rapid Research - Data Innovations](#)
- [Computer Science is Changing Everything](#)
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- [The Math Behind Basketball's Wildest Moves](#)

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**Data and
Medicine
(6:07)**



**Computer
Science is
Changing
Everything**
(4:33)

**The Math
Behind
Basketball's
Wildest Moves**
(12:00)

One of the things that many modern innovations have in common is their use of data (often Big Data, but not always). To explore how innovations use data more in depth you will be completing a rapid research project on a “data innovation” of your choosing.

Get excited! This is your opportunity to dig deeper into a computing topic that has piqued your interest over the entire course.

What kinds of things are you interested in?

How does computing affect them?

How is data used to make innovations you’re interested in actually work?

The project mimics some of the things you have to do for the Explore Performance Task and will be useful preparation.

In particular the Explore Performance Task asks you to:

- Research a modern computing innovation.
- Explain how it uses, produces, or consumes data.

This is exactly what you'll be doing today!

It would not be a good idea to pick the same topic for the Explore PT. To help you pick a topic, please choose one of the following:

- Google Glass
- Gas Buddy
- GoFundMe
- reMarkable
- uber app

Name(s) _____ Period _____ Date _____

Activity Guide: Rapid Research - Data Innovations

Review Activity Guide

Pick an Innovation/Topic and do a quick Google search to make sure there are resources available (you need at least 3).

Once you have verified the resources, please get your Innovation/Topic approved by me.

- Google Glass
- Gas Buddy
- GoFundMe
- reMarkable
- uber app

Project Overview: Data Innovations

In this small project, you will quickly research a computing innovation of your choice and present a “one-pager” about it. The computing innovation should be one that produces, uses, consumes or is “driven” by data in some way.

The One-Pager

In the professional world it is common to ask someone to do a bit of online research and then prepare a one-page summary or “one-pager” to show the rest of the team or colleagues about the highlights of what you found. For this project you will prepare a one-pager that explains how some technological innovation uses data.



General Process & Requirements

- Review the One-Pager Template and the **Rubric** below.
- Choose your innovation using the guide below to help.
- Conduct your research by following the **Research Guide** below.
- Complete the one-pager.

Choosing Your Innovation

You should choose an innovation related to big data that you find personally relevant or interesting. For the

In Classroom, use the One-Pager Template.

ALL text in *Italics* MUST be REPLACED and/or DELETED.

Name(s) _____ Period _____ Date _____

Data Innovation One-Pager Template <change this to your title>



Note: All text in Italics, including this text, is intended to be replaced by your responses, and deleted once you've completed your one-pager.

Innovation Purpose

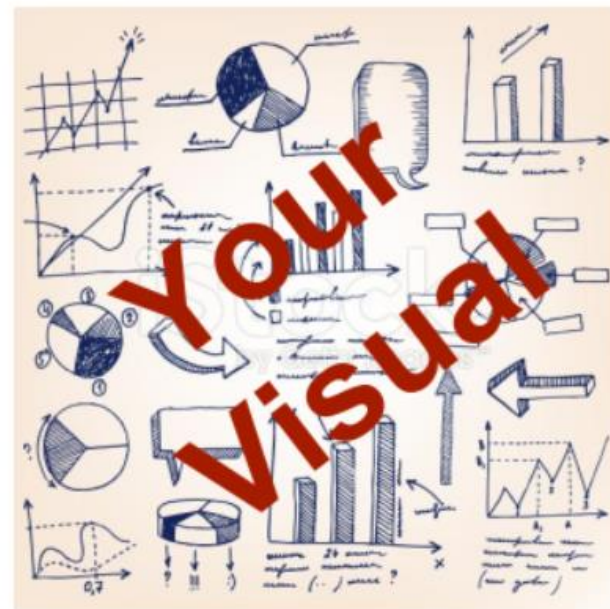
What is the intended goal or objective of the innovation? Why was it created in the first place? What need or problem led to it being created? Assume that the audience doesn't know much about the topic.

Innovation Function

How does the innovation work? What data does this innovation use, produce, or consume? Where does the data come from? How is it collected? Who is collecting it? If possible, how and where is it stored? Do they provide public access to this data? If so, put a link to it here.

Beneficial Effect on Society, Economy, or Culture

Think big picture. What is a group of people that benefits from this innovation? How specifically do they benefit?



Day 1 - Choose Innovation, Read and Research

Review Activity Guide and Rubric:

- emphasize the importance of reviewing the one-pager template and rubric.
- emphasize that they do not need to create their artifact themselves, but it must still meet the requirements of this project.
- The written component is quite short/space for 100-150 words per response.

Choosing Your Innovation: (20 minutes). Students should not leave class after the first day without a topic in mind and ideally with some resources identified.

Conducting Your Research: This document is intended to serve primarily as a guide to students for identifying online sources of information. **The skill students need to develop is identifying useful resources on their own and then synthesizing this information.**

The "Key Information to Find" highlights specific terminology from the Explore PT that students will benefit from having seen earlier in the course.

Day 2 - Prepare one-pager

Identify a Visual: Students need to identify a visual artifact (image, visualization, drawing, chart, video, interview, etc.) that gives some additional insight into their innovation. Students **DO NOT** need to make this visual themselves. The goal is to effectively use a visual to communicate information about a technical topic.

Complete One-Pager: Students should find this aspect of their project most familiar. The prompts are similar in style and content to prompts students have already seen. Emphasize the need for **clarity** in their writing, and remind them that everything must fit on a single page. If they have responded completely to each of the prompts, it is fine to write less.

Sharing/Submission: We will grade each other's One-Pager using the rubric and create a Data Innovations Museum so that we can view everyone's work.

Check Your Understanding (Complete at the END of the Rapid Research project.)

▼ Lesson 4: Rapid Research - Data Innovations

- 1 Lesson Overview
- 2 Data and Medicine
- 3 CS is Changing Everything
- 4 Check Your Understanding**