Problem Solving and Computing
Lesson 7
Storage

Teacher Resources

For Teachers!

Lesson Overview

This lesson introduces the final component of the unit's model of computing: storage. After trying out an "outfit picker" app, students discuss what information should be stored in the app versus input every time the app is run. They then look at a series of apps and use their decisions about what should be stored to create guidelines for deciding what information to store. They then review the four components of this chapter's model of computing: input, output, storage, and processing. Afterward, they have one last opportunity to revise their decisions about which items should be classified as a "computer" from earlier in the chapter. The lesson ends with a reflection on their own app ideas and how storage could be used.

More guidance and resources for this lesson are available in the **Lesson Plan:**

- https://studio.code.org/s/csd1-2023/lessons/7

Warm Up

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Journal Prompt:

Go on Code Studio to look at the outfit picker app.

- What is one input, one output, and one kind of processing it might use?
- If you used this app every day, what information would you want it to remember?

Key Vocabulary

Storage - saving information to use in the future

Question of the Day

Why is storage an important part of the computing process?

Activity

Storage: Outfit Picker

Get into groups of 2-3 and go to Code studio.

Based on the outfit picker app in Code studio, answer the following questions:

Should the following information be stored?

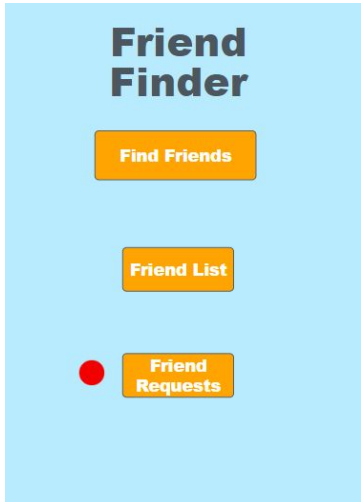
Why or why not?

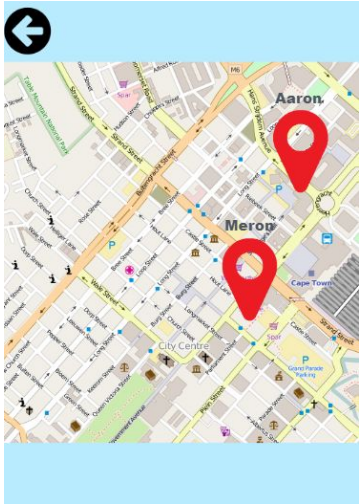
- Favorite color
- Season
- Weather

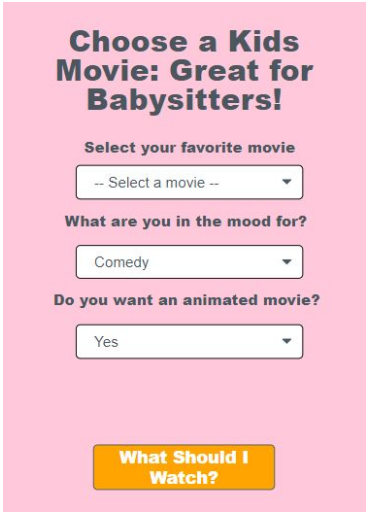
Friend Finder and Movie Picker

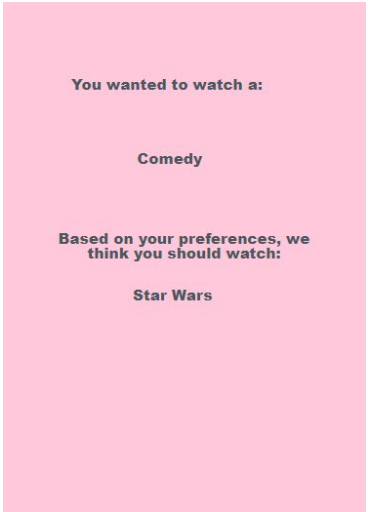
In your groups, try out these two apps.

On your activity guide, explain which information should and should not be stored and *why.*





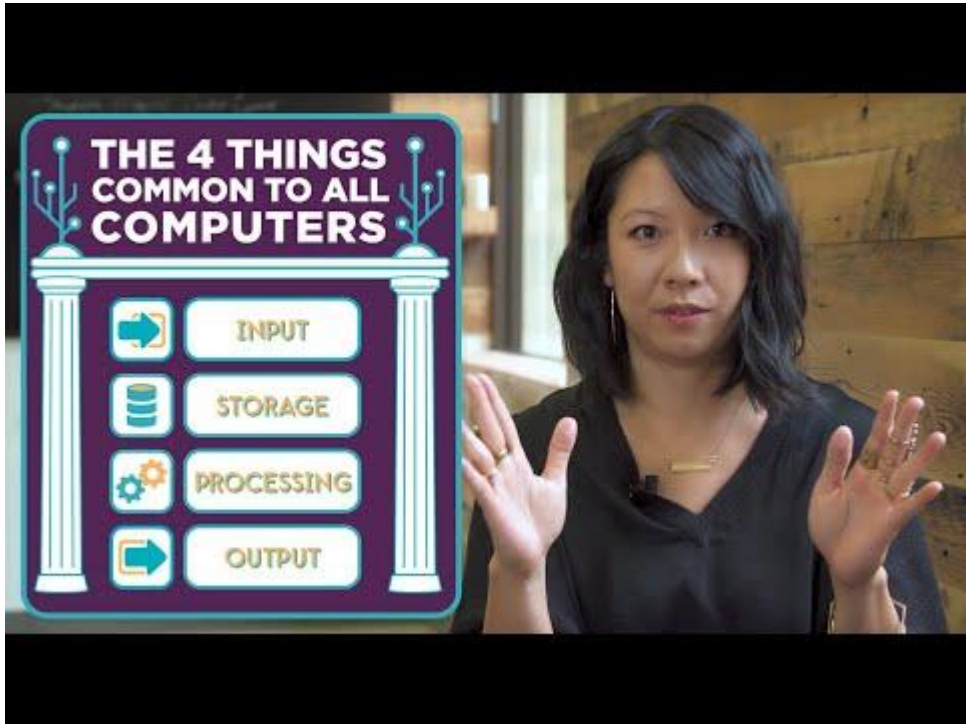




Guidelines for Storage

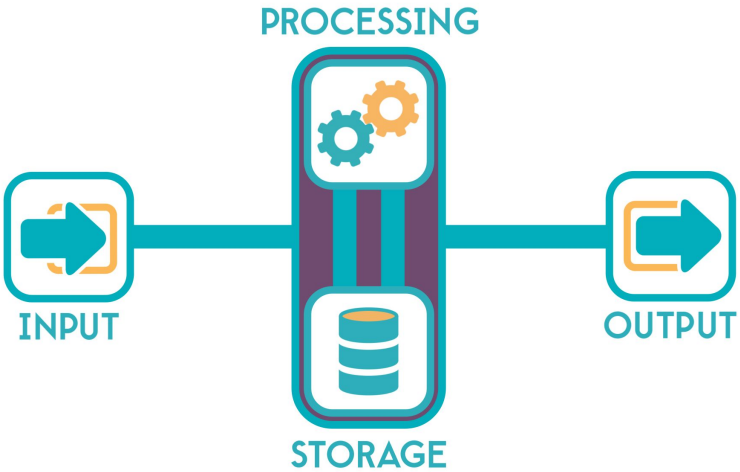
In your groups, brainstorm at least two guidelines about what types of information should and should not be stored.

“If the information _____, then that information (should / should not) be stored because _____. For example, _____ (should / should not) be stored.”



Think of something you do on the computer. What sort of input, output, storage, and processing are happening?

Input-Output-Storage-Processing Model



What kinds of input, output, storage, and processing are used in a modern smartphone?

Wrap Up

Prompt:

Think of an app you would like to make.
What information would it store?

Key Vocabulary

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