

AI & Machine Learning

Lesson 16

Issue Statements

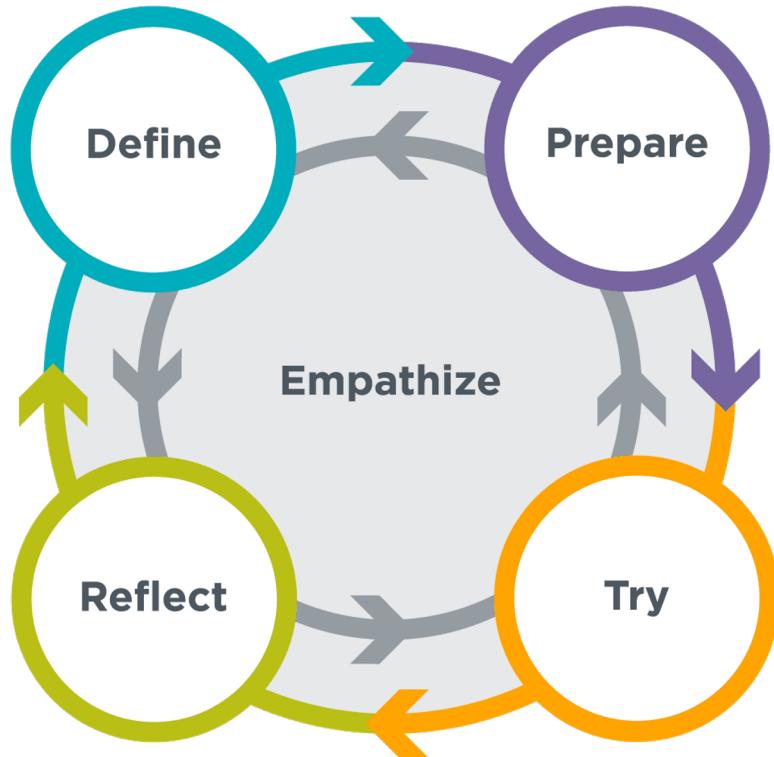
Warm Up

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Writing Prompts:

- 1.What is something you see regularly in your community that you wish you could improve?
- 2.Who are the people affected by this?

The Problem Solving Process



Rhetorical Question of the Day

How can machine learning be used to address an issue in your community?

Activity





Observation

When we sit together at lunch, we spend most of the time on our phones and don't really talk to other people



Writing Prompt:

Does this observation by itself require machine learning?

Observation

When we sit together at lunch, we spend most of the time on our phones and don't really talk to other people



Why?

It's easier to just be on our phones, especially when we don't know other people very well yet

Problem Observation: When we sit together at lunch, we spend most of the time on our phones and don't really talk to other people

Why?

It's easier to just be on our phones, especially when we don't know other people very well yet

Why?

Why?

Why?

Why?

Goal

Core Issue

Prepare

You should have:
5 Why's Activity Guide (on Schoology)

Problem Observation: When we sit together at lunch, we spend most of the time on our phones and don't really talk to other people

It's easier to just be on our phones, especially when we don't know other people very well yet

Why?

Why?

Why?

Why?

Why?

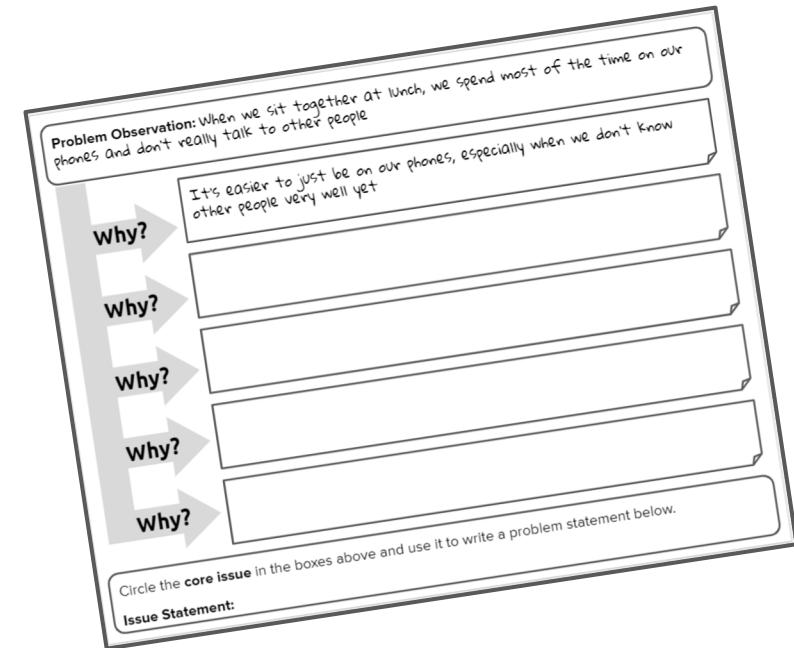
Circle the **core issue** in the boxes above and use it to write a problem statement below.

Issue Statement:



Do This

Fill out the answers to the remaining “Why” questions. Try to get to the core of why this problem may be happening.



Key Vocabulary

- An **Issue Statement** describes a larger pattern or issue that you would like to help solve.

Tips for Writing an Issue Statement

- **Focus on the user.**
 - Make sure that the issue you're addressing will help people in your community.
- **Keep it broad.**
 - This lets you be creative with the kind of app we can design.
- **Make it manageable.**
 - Trying to solve too big of a problem can be frustrating - instead, focus on an issue you can see in your community.

Do This

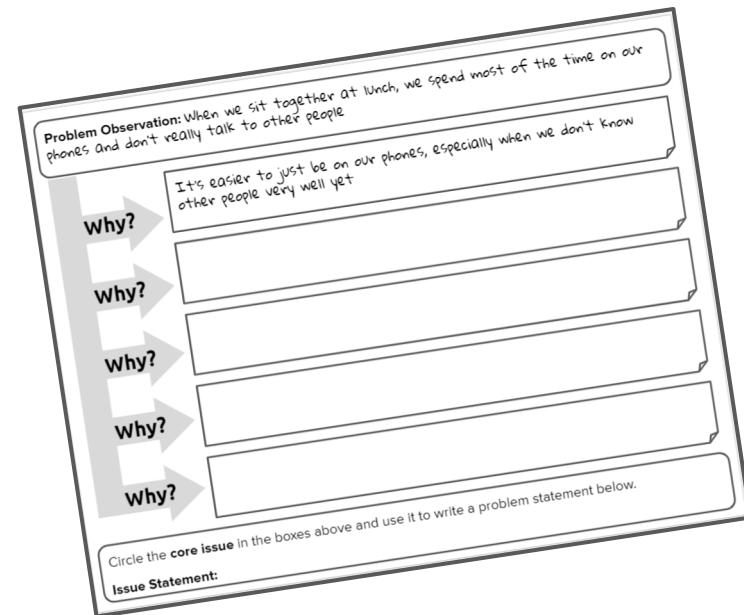
Write an Issue Statement at the bottom of your activity guide.

You can use these as sentence starters:

I notice people **feel** ... This is an issue because...

I notice people **need** ... This is an issue because...

I notice **it's hard for** people to ... This is an issue because...



Writing Prompt:

What issue statements did you come up with?

Problem Observation: When we sit together at lunch, we spend most of the time on our phones and don't really talk to other people

Why?

It's easier to just be on our phones, especially when we don't know other people very well yet

Why?

It's hard to make new friends as you get older

Why?

People are afraid to talk to new people or reach out to meet new people

Why?

It's easier to just be by yourself than take a risk to talk to someone new

Why?

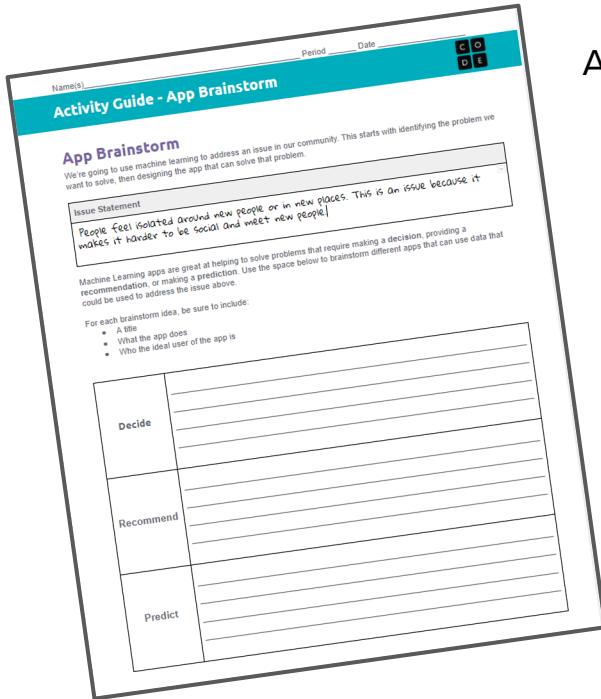
Core Issue

People feel isolated around new people or in new places.

This is an issue because it makes it harder to be social and meet new people.

Prepare

You should have:
App Brainstorm Activity Guide (on Schoology)



Types of ML Apps

Decide	
Recommend	
Predict	

Machine Learning Apps use data to do one of three things:

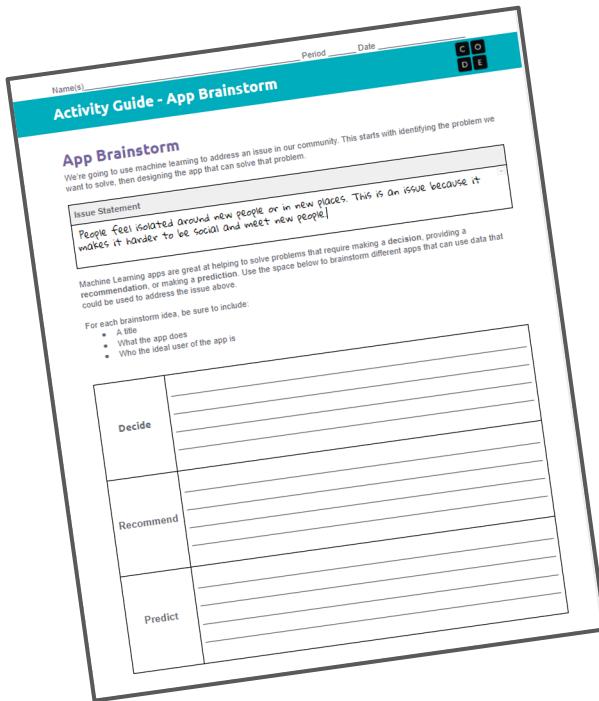
- Make a decision
- A recommendation
- A prediction

Do This

Brainstorm three different apps that can use data to address this issue.

For each brainstorm idea, be sure to include:

- A title
- What the app does
- Who the ideal user of the app is



Kim's App Idea: Virtual Pet!

The app gives you a virtual pet you can play with! You can feed it, pet it, and offer it treats and it will react to you. This helps with feelings of isolation because then you won't feel so lonely!

Do we think this app uses data for machine learning?



Nico's App Idea: Loneliness Predictor

This app asks you a series of questions, then determines how lonely you are then makes recommendations based on the result. This helps with feelings of isolation because it gives you ideas of something to do instead.

Do we think this app uses data for machine learning?



Isaac's App Idea: Table Decider

This app asks you questions about your lunch room and other people in the room, then helps you decide which table you should sit at for lunch. It helps with isolation because it helps you decide where to sit to meet new people.

Do we think this app uses data for machine learning?



Zoey's App Idea: Icebreaker Recommender

This app randomly recommends a new icebreaker question you can ask new people, like “what kind of superpower would you like to have?”. It helps with isolation because it helps you start conversation with new people.

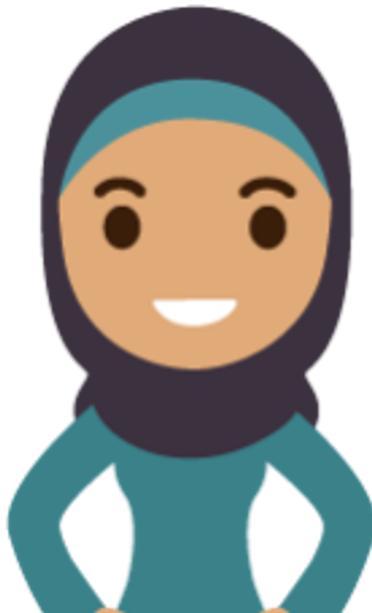
Do we think this app uses data for machine learning?



Hawa's App Idea: Club Recommender

This app asks you questions about what you're interested in, then recommends a club to join at your school. This helps with feelings of isolation because joining a club is a good way to meet people with similar interests.

Do we think this app uses data for machine learning?



Writing Prompt:

What ideas did you come up with?

Wrap Up





Writing Prompt:

Why is it useful to brainstorm a core issue rather than just using an initial problem observation?



Question of the Day

How can machine learning be used to address an issue in your community?