



Experience AI Challenge

Blueprint



Name:

Stage 1: What is machine learning?

Have a play with the app at **Speechtexter.com** online. You'll need a computer or device with a microphone — if you don't have one, you can skip these two questions. While you're dictating things, think about:

1. What is the application doing? What clues can you see on the screen?

2. How do you think the application works to output or produce these predictions?

Once you've had enough of dictation, go to **rpf.io/qdraw** and have a play with an AI-powered game called *Quick, Draw!* (You can use your mouse or trackpad to draw.) While you're drawing, think about:

3. What is the application doing? What clues can you see on the screen?

4. How do you think the application works to predict what you are trying to draw?

Watch the [video about Quick, Draw!](#) to see the designers of the game explain what it does, and have a look through the [Quick, Draw! image data set gallery](#) to see what *thousands* of other people drew!

Apples and tomatoes — Testing your model's results

Once you have tested a few of the apple and tomato images, answer the following questions:

Describe the results of your testing. How accurate was the model?

Why do you think the prediction is sometimes wrong?

How could you improve the accuracy of the model?

Stage 2: Classifier warm-up

Testing your model's results

Once you have tested your model a few times, answer the following questions:

Describe the results of your testing. How accurate was your model?

Why do you think the prediction is sometimes wrong?

How could you improve the accuracy of your model?

Stage 3: Make a machine learning app

Empathise

Ask yourself these questions or discuss them in your group and write the answers below, to help you organise your thoughts!

Who's it for?

Who do you think will use this app the most? What do they want the app to help them with?

What's out there?

Do you know if your user currently uses any other apps or tools for this? What's cool or not so cool about those?

Nice and easy or techy?

Does your user want something super simple, like a toy, or something a bit more complex?

Where & when?

Can you picture a time or place that this app would be used? Why would it be super helpful then?

Keeping secrets safe

How does your user feel about sharing their information or images with the app? Would they want some things to stay private?

Dream results

After using the app, what awesome thing does your user hope will happen? Maybe they can find things faster, notice trends, or see cool patterns?

Define

Ask yourself these questions or discuss them in your group and write the answers below, to help you organise your thoughts!

Main mission

Based on what everyone said, what's the BIG thing your app should do? If your app was a superhero, what would its superpower be?

Problem breakdown

What are the most important parts of the problem you're trying to solve? If you were to describe your app to a friend, what are the things you'd tell them about first?

Dream features

If you could add any feature you want to the app, what would it be? Think big! Don't worry too much about how you're going to do it — what's the ultimate dream feature?

User stories

Can you make up a short story or example of someone using the app? Like, "Jamie used the app to sort her rock collection and found out she had 5 super rare ones!"

Top priorities

If you had to pick just 3 things the app MUST do, what would they be? Think of them as the golden rules!

Fun vs. functional

Should the app be more fun and game-like or more like a helpful tool? Or a mix of both? How will you make it fun? What would make it helpful?

Look and feel

How should the app look? Bright and colourful like a candy store? Or cool and sleek like a spaceship? Draw some pictures to help yourself envision your app.

What success looks like

How will you know if your app is a winner? Maybe everyone wants to use it, or it gets 5-star reviews? Maybe it looks super cool, or makes people laugh?

Ideate

Ask yourself these questions or discuss them in your group and write the answers below, to help you organise your thoughts!

Idea storm

If you had a magic wand, what cool features would you add to the app? Think wild and wacky! Write them all down and worry about how achievable they are later.

Inspiration station

- Are there any apps or games you love? What do you like about them? Can you borrow some of those cool ideas?
- Are there things about them you don't like and want to avoid in your own app?

Fun factor or helping hand?

- What would make the app super fun to use? Maybe it gives out virtual high-fives or has funny sound effects?
- How can the app be really helpful? Does it give hints or tips? Or maybe it solves a serious issue?
- Do you want it to do both?

Sketch it out

Can you draw or doodle what you imagine the app might look like? Maybe it has a dragon mascot or a space theme? How is it laid out on screen? How will your users provide input?

Test

Use this table to collect **two stars and a wish** about your application!

[illegible]

Use this table to collect **traffic light feedback** about your application!

[illegible]

Use this table to collect **storyboard feedback** about your application!

[illegible]

Model Card

NAME OF MODEL: _____

Model description: *What does the model do?*

Intended use: *Who might use this app and for what purpose/how it would benefit them?*

Data set: *Reference your source of data — where did you get it? How much is there?
(You can find this info in your model page on Machine Learning for Kids!)*

Limitations: *Describe any limitations in the data used to train the model: amount of data collected, where the data has come from, etc. What potential bias might be in the data?*

Accuracy: *Report on results of testing — how well does your model predict things? How often is it right? Can you give it a score out of 100%?*