

Designing your solution

It's time to design your project!

List of parts to my project

● Hardware (e.g. components):

● Software (e.g. screens, characters):

Data

● **My project will ask the user for information.**
How it will get the information from them:

● **My project will show information to the user.**
How it will do that:

Information needed:

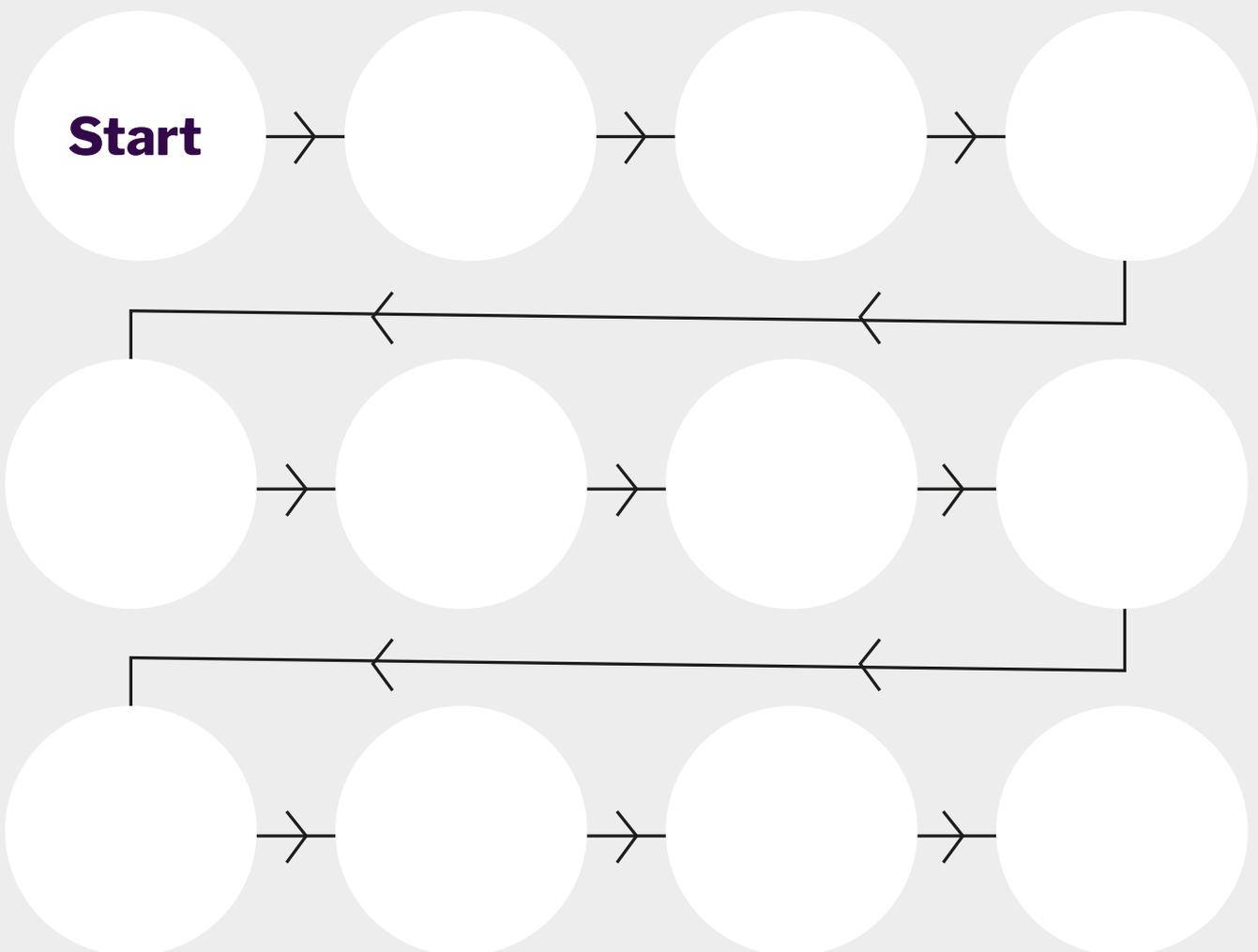
How the information will be used:

Think about how the different parts of your project are organised and connected. Is there a start and an end? Use this page to list the things your project will do and in what order it will do them.

What it will do:

Order:

In the first circle, describe the first step for a person using the project. Try to complete the diagram by adding more steps! Will your project give **feedback** to the user, such as sounds, messages, or flashing lights? Include that in the steps too!



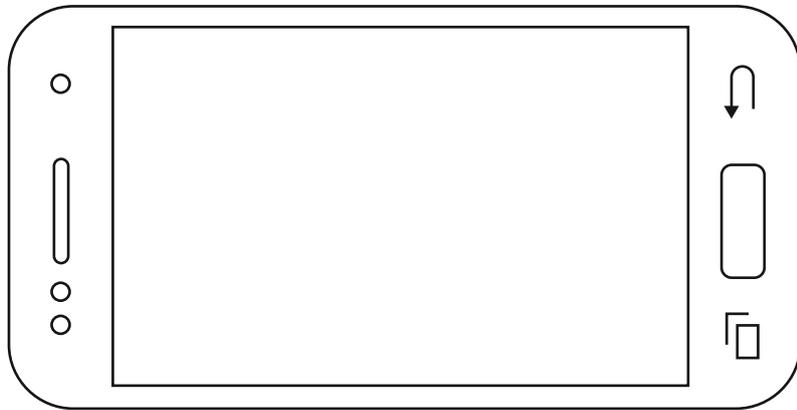
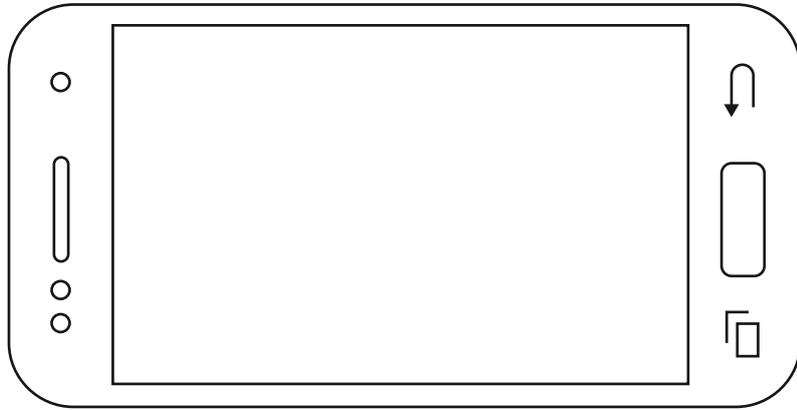
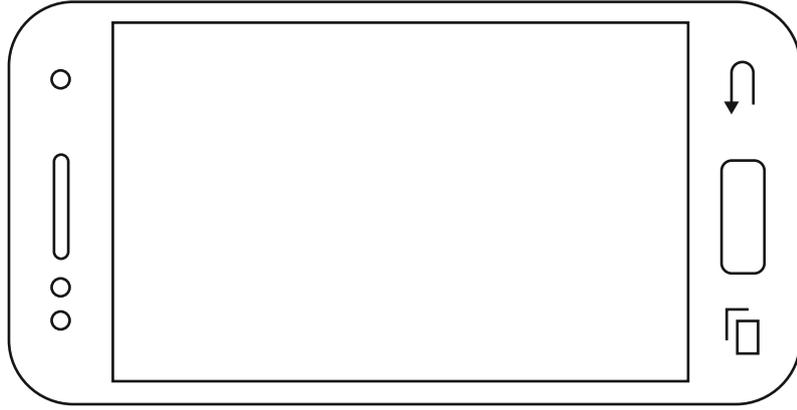
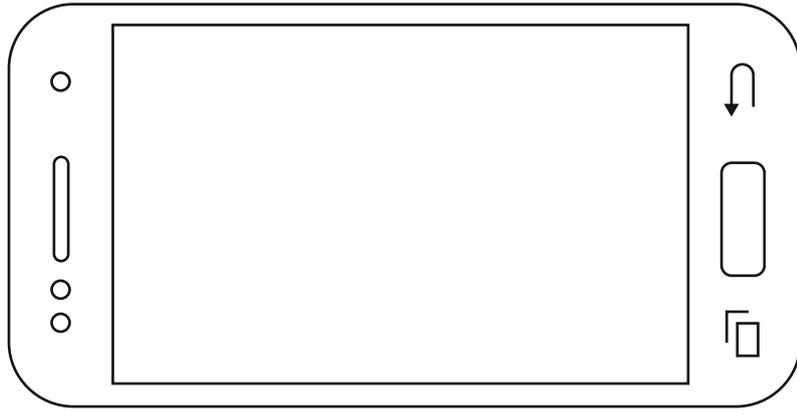
Finally, sketch out how your project will look.

If you're making a software project, draw pictures of the screens you'll create. If you're creating a hardware project, make a sketch of what it will look like in action. If your project is an animation or story, draw some of the main scenes and characters.

Think about how a person will interact with your project. Will they use things like buttons? Will they need to navigate it? How will a person learn how to use the project?

If you identified any **accessibility** needs of your users earlier, consider how you might address those needs when drawing your designs.

This way up





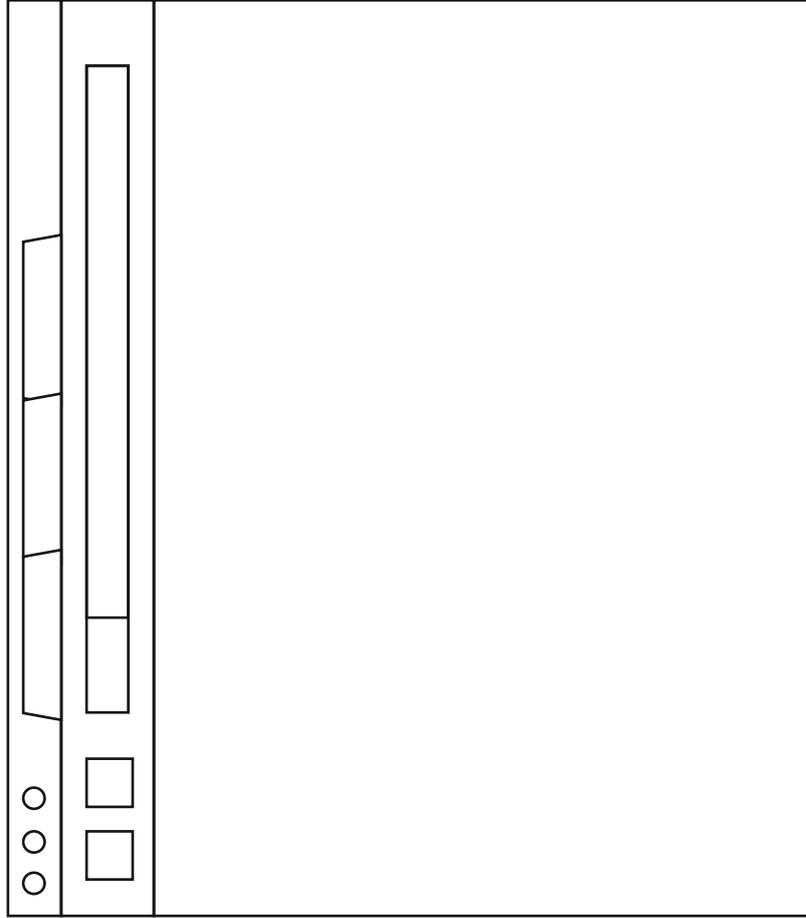
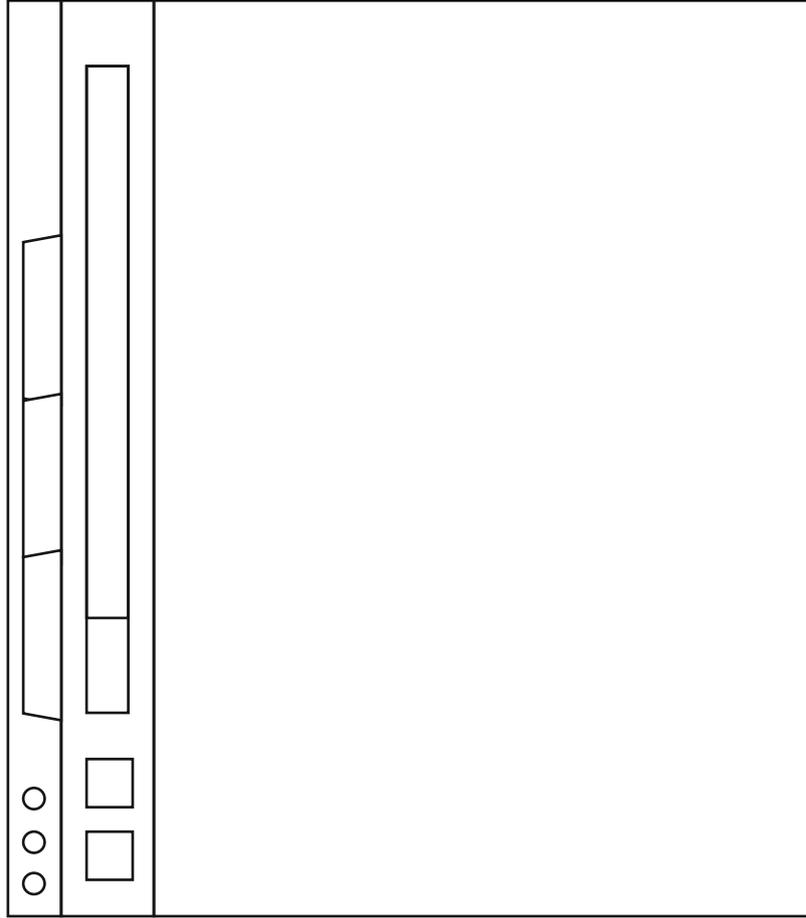
CoderDojo

This way up

Part of



Raspberry Pi



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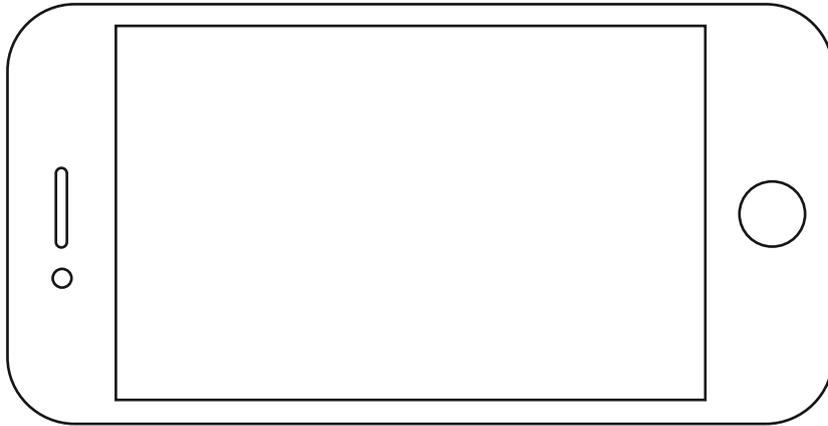
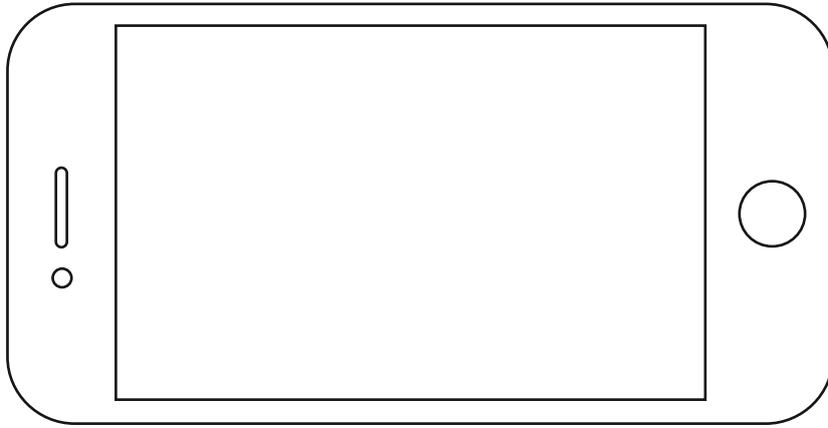
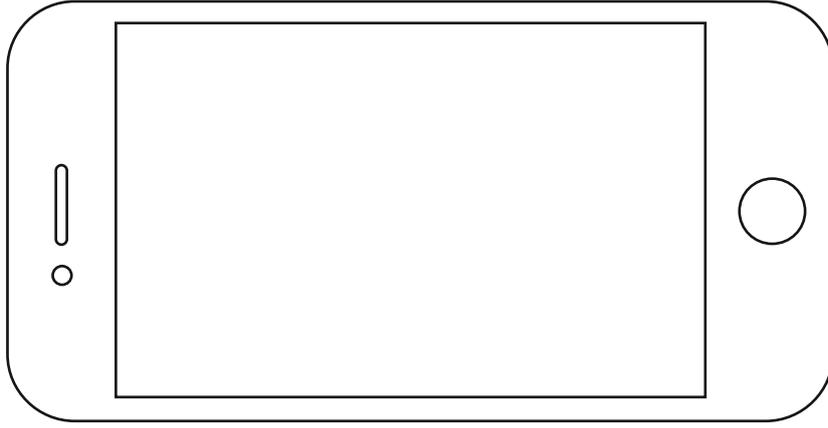
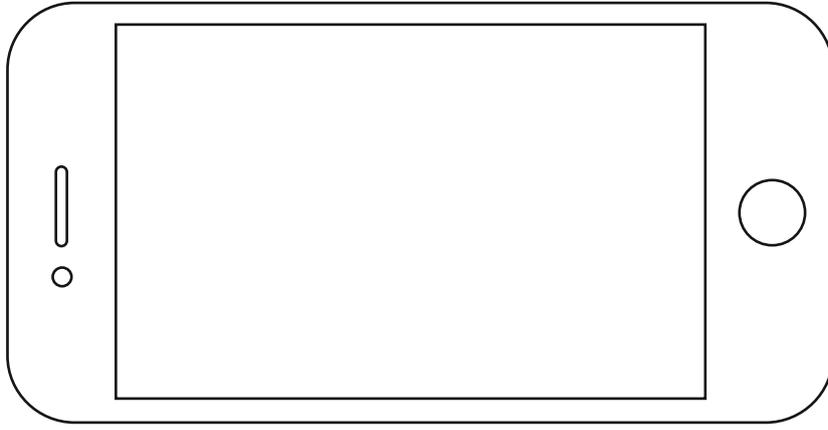
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Part of



Raspberry Pi

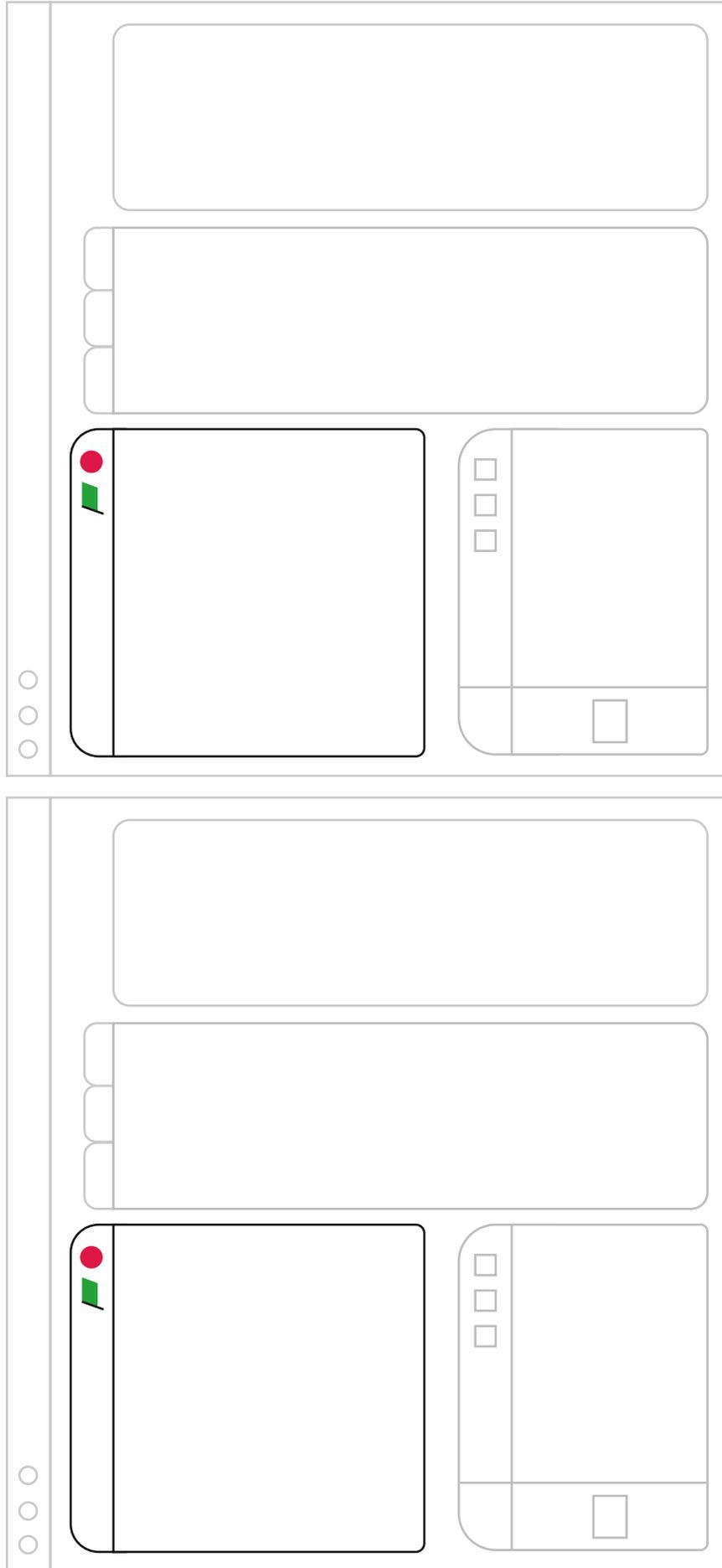
This way up



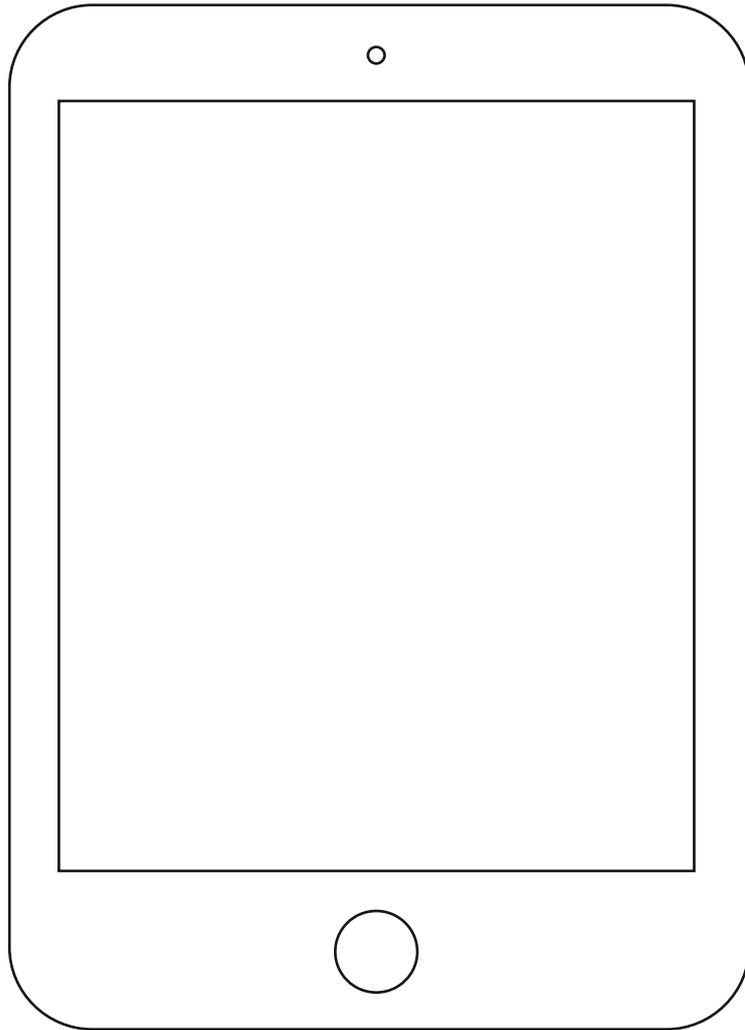
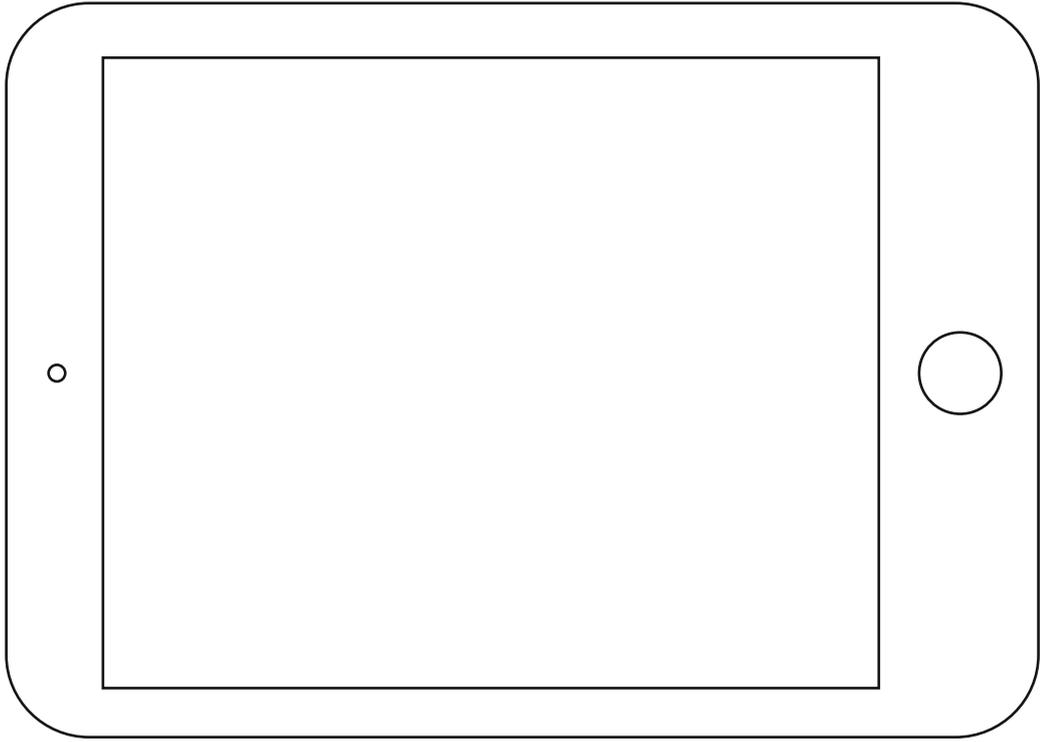
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This way up



This way up



Build a Prototype

Based on the design you've laid out in these sheets, build a paper prototype! Rather than starting to code or build the real thing, use paper, pens, post-its, etc.



A prototype is a version of your project that is used to test ideas.



The purpose of a prototype is to get somebody to try out your design to see if it meets their expectations of how the project will work.

Prototyping is useful because it's much easier to make changes to the design than it is to change something you've already coded.

Test the prototype!

Person testing:

What did they test?

Date:

Have somebody (it could be you!) test out what you've made and take some notes about how it goes. If they ask you any questions or need help with something, make a note of that too – this might be where you need to make improvements to your design.

What did they think of it overall?

- It's great, I love it! It was OK Something needs to change

What parts worked? What did they like best?

How well does your project address your chosen problem? What could be improved about it? Is anything missing?

What will I do next?

- Re-design something that's not working Fix or improve my code
 Start designing a new feature