

# We are App Planners

**Challenge:** To create presentation to pitch a smartphone or tablet app

A Good Example: Revision app for Key Stage 2 SATS

**Software:** App Inventor/TouchDevelop, Picasa Web, Google Drive Presentation/Prezi or similar  
**Apps:** Codea, TouchDevelop  
**Hardware:** Computers and tablets or smartphones (can be done with a phone emulator)  
**Outcome:** A presentation to pitch a smartphone or tablet app

## Prior knowledge:

In year 5, children have learnt to create and develop games following the principles in Scratch. They have considered simple coding and the function it has in the IT world. Programs linked to drawing, blogging and 3D landscapes have been explored.

## Key Vocabulary:

App – an application downloadable to a mobile device  
 Geotag – an electronic “tag” that assigns a geographical location to a photo, video or posting.  
 GPS – Global Positioning System (links to location)  
 Input – where energy or information enters a system.  
 Output – where energy or information leaves a system  
 Pitch – try to persuade someone to accept something.  
 Smartphone – a device which works like a computer.

## The Journey

Activities include:

- Develop an awareness of the capabilities of a smartphone or tablet.
- Understand geolocation and GPS.
- Identify interesting solvable problems.
- Evaluate computing app based products.
- Pitch a proposal for a smartphone app or tablet app
- Working collaboratively with a partner or in a small group.

## The Final Piece

Outcome

A presentation to pitch a smartphone or tablet app that would be of interest to children.

Parameters

- Must not be copied and pasted information.
- Must include a clear pitch and brief about the app purpose.
- Must allow all members of the group to speak/share.
- Must be based on research and for children

*See useful links 1 & 2 for ideas*

# We are Project Managers

**Challenge:** To create a project management document linked to an app

**A Good Example:** A clear and detailed plan for managing the app project.

**Salma** - Really good at **organising** - going to be our team leader

Will use Google sites to manage our schedule.

**Emma** - Good at **writing** - is going to write the interview questions for our focus group and also the questions for our online survey. We can then all look at them together.

(Emma hasn't used Google Forms yet so she is going to have an introductory session with Miss Evans about how to use it.)

**Thomas** - Really **enjoys programming** so is going to find out more about how app inventor works so that we have an expert in our group.

Thomas has already started looking at app inventor. He is going to show us all how this works so we can learn about it too.

**Jake** - Likes to **film video** - will be our camera man and director for the video for our app.

Editing film in Movie Maker, which we have done before.

**Zahra** - Good at **art** - could come up with the plan and design for our app interface? She is also going to help with the design for our marketing material.

Creating our wire frame for our app in powerpoint, which we have used before. BUT Marketing material will be done in Publisher which Zahra hasn't used before so she needs to learn how to use this.

**Software:** Google Apps for Education/VLE/GitHub/Basecamp

**Apps:** Web browser (Safari)

**Hardware:** Laptop or desktop computers, internet access

**Outcome:** A clear and detailed plan for managing the app development project

## POSSIBLE OUTCOME FOR THIS STEP:

Steps for creating our app:

- 1 Research the market (get some feedback on our app ideas)
  - meet with other children and ask them questions
  - what did we find out?
- 2 Decide on the interface for our app - what it will look like
- 3 Create our app, using App inventor (who is going to do this - we don't know how to use it!)
- 4 Market our app
  - create a video for our app
  - create a poster
  - create a website for our app

## Prior knowledge:

In year 5, children have learnt to create and develop games following the principles in Scratch. They have considered simple coding and the function it has in the IT world. Programs linked to drawing, blogging and 3D landscapes have been explored.

## Key Vocabulary:

Autonomy – free from external control/influence/desire  
 Estimate – approximate calculation/judgment of value  
 Resources – stock or supply of money, resources, staff  
 Schedule – a plan for carrying out a process (lists)  
 Scope – the extent of the area that something deals with  
 Slippage – failure to meet the standard or deadline.  
 Teamwork – combined action of a group when effective.  
 Template – a preset format for a document or file.

## The Journey

Activities include:

- Scope a project and all of its components linked to the app.
- Identify the talents of a group and plan how they can develop skills.
- Establish a clear schedule and timeline
- Use web-based research skills to source tools, content and other resources.
- Consider strategies to ensure the quality of the project completion.
- Working collaboratively with a group.

## The Final Piece

Outcome

A clear and detailed plan for managing the app development project which is of interest to children.

Parameters

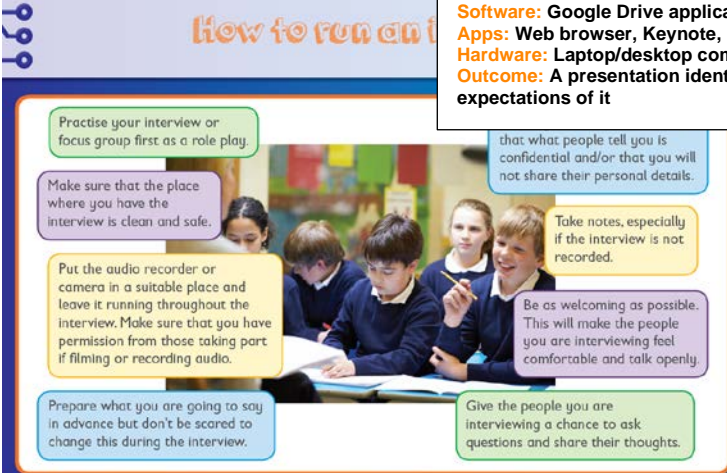
- Must not be copied and pasted information.
- Must include a clear plan, timeline and schedule which involves all of the group.
- Must allow all members of the group to speak/share.
- Must be based on research and for children.

*See useful links 1 & 2 for ideas*

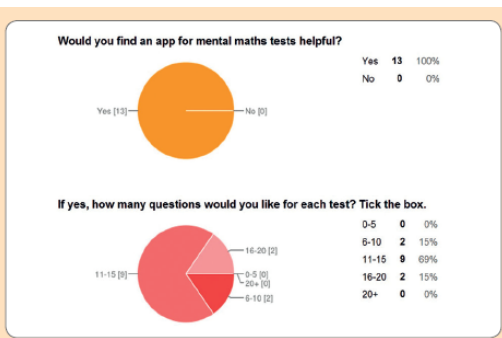
# We are Market Researchers

**Challenge:** To create a presentation identifying the market for their app establishing potential users for it, along with their expectations.

A Good Example: Presentation identifying the market and users for the app.



**Software:** Google Drive applications/Microsoft Office, Microsoft Windows Live Movie Maker®  
**Apps:** Web browser, Keynote, iMovie  
**Hardware:** Laptop/desktop computers, internet access  
**Outcome:** A presentation identifying the market for their app and establishing users' expectations of it



## Prior knowledge:

In year 5, children have learnt to create and develop games following the principles in Scratch. They have considered simple coding and the function it has in the IT world. Programs linked to drawing, blogging and 3D landscapes have been explored.

## Key Vocabulary:

Analyse – examine something in detail (logically)  
 Audience – people who are giving interest to something  
 Confidentiality – state of being kept secret or private  
 Consent – permission for something to happen (agree)  
 Focus group – a group involved with a product before it is launched. OR assigned to give feedback or information.  
 Survey – investigate through questions/opinions  
 GDPR – General Data Protection Regulation (Legal)

## The Journey

Activities include:

- Create a set of good survey questions.
- Analyse the data from the survey.
- Work collaboratively to plan further interview questions for research.
- Conduct an interview of a focus group
- Analyse data from the interview.
- Present findings from the research.
- Working collaboratively with a partner or in a small group.

## The Final Piece

Outcome

A presentation identifying the market for their app and potential users. (Interest to children)

Parameters

- Must not be copied and pasted information.
- Must include 10-15 survey questions.
- Must provide clear analysis of the data from the survey and interview.
- Must allow all members of the group to speak/share.

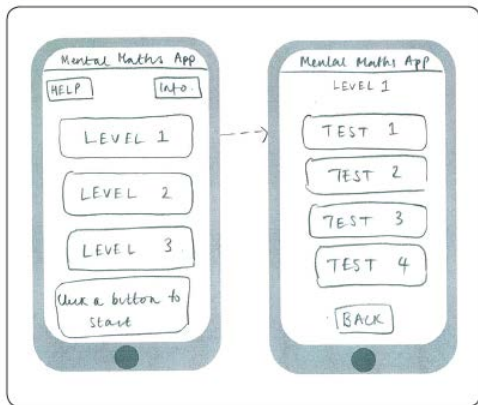
*See useful links 1 & 2 for ideas*

# We are Interface Designers

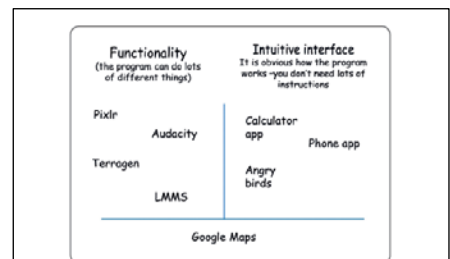
**Challenge:** To create a sketch plan of the different screen layouts for the app.

A Good Example: Sketched, planned and designed screen “interface” layouts.

## POSSIBLE OUTCOME FOR THIS STEP:



**Software:** Justinmind Prototyper/Pencil Project/Microsoft PowerPoint®  
**Apps:** SketchyPad or iMockups (pay-for apps)  
**Hardware:** Laptop/desktop/tablets  
**Outcome:** Wireframe designs and media assets for their apps



How does our app link to the apps that we play? Can we improve it in any way? What else do we need to do to make it a success?

## Prior knowledge:

In year 5, children have learnt to create and develop games following the principles in Scratch. They have considered simple coding and the function it has in the IT world. Programs linked to drawing, blogging and 3D landscapes have been explored.

## Key Vocabulary:

- Accessibility – the quality of being easy to use/obtain
- Asset – useful or valuable to others
- Copyright – the legal right to a product or commodity.
- Design – a drawing to show how something looks. Interface – a device or program enabling communication
- Prototype – a 1<sup>st</sup> version of a design, device or app
- Screencast – a video/audio version of the app
- Wireframe – an image or set of images which display the functional elements of a website, webpage or app.

## The Journey

Activities include:

- Work collaboratively with a partner or group to design the app interface.
- Use wireframes to create a design prototype of the app.
- Develop and source other media tools (images, sound, animations etc) for the app development.
- Address accessibility and inclusion issues – solving them too.
- Document the design process.

## The Final Piece

Outcome

A create a sketch plan of the screen layouts for the app.  
 To produce a wireframe interface prototype

Parameters

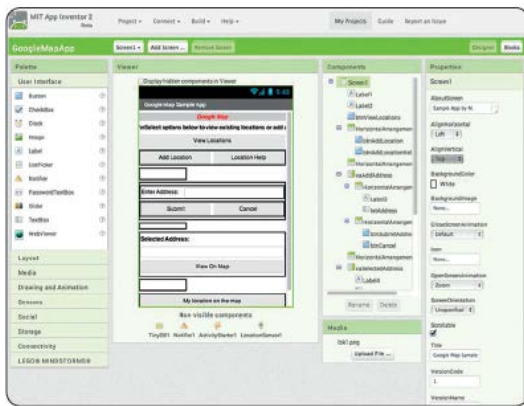
- Must not be copied and pasted information.
- Must include sketched plans / designs of their app development screens.
- Should attempt to use at least 1 wireframe tool.
- Must allow all members of the group to speak/share. [See useful links 1 & 2 for ideas](#)

# We are App Developers

**Challenge:** To create a simple mobile phone (device) app

A Good Example: Revision app for Key Stage 2 SATS

## POSSIBLE OUTCOME FOR THIS STEP:



**Software:** App Inventor/TouchDevelop  
**Apps:** TouchDevelop/Codea  
**Hardware:** Computers and tablets/smartphones/phone emulator  
**Outcome:** A working app



### BACK UP PLAN

If we cannot get the actual app to work, we could always use a different computer based emulator, such as Powerpoint or Scratch. Some of these still use coding.

### Prior knowledge:

In year 5, children have learnt to create and develop games following the principles in Scratch. They have considered simple coding and the function it has in the IT world. Programs linked to drawing, blogging and 3D landscapes have been explored.

### Key Vocabulary:

- Algorithm – a set of codes, calculations and rules that a computer needs to follow for a program to work.
- Asset – useful or valuable to others.
- Components – parts or elements of a larger whole.
- Debug – identify and remove errors from a computer
- Program – a series of instructions to control a device
- Pseudocode – notation like simple code language
- Toolkit – a set of software tools.

## The Journey

Activities include:

- Become familiar with another programming toolkit or development platform.
- Import existing media to the project.
- Write clear algorithms for the app.
- Program, debug and refine any codes.
- Test the app – self and by others.
- Evaluate the app – set and by others.
- Working collaboratively with a partner or in a small group.

## The Final Piece

Outcome

A simple working app which meets the needs of the project.  
 (smartphone, device, computer)


Parameters

- Must not be copied.
  - Must include images and other media to enhance the app use.
  - Should include algorithms and codes for usage.
  - Must allow all members of the group to speak/share.
  - Could work with IT gurus
- See useful links 1 & 2 for ideas*

# We are App Marketers

**Challenge:** To create a simple video and web copy for a mobile phone app

A Good Example: Revision app for Key Stage 2 SATS / Homework Trapper App



**Marketing a product**

What does the app do?

Who is the app designed for?

Where might the app be used?

When would the app be used?

How easy is the app to use?

What's the unique selling point (i.e. what does it do differently from all the other apps)?

What platform is the app for?

What are the key features of the app?

How much does the app cost?

Is the app safe?

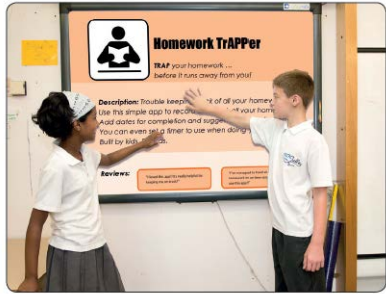
**Software:** Microsoft Publisher™, WordPress/Google Sites, Movie Maker® and other programs chosen by the pupils

**Apps:** Pages, WordPress, iMovie and other apps chosen by the pupils

**Hardware:** Laptops/desktop computers, cameras

**Outcome:** Advertising material for the pupils' apps (printed, online and video)

**POSSIBLE OUTCOME FOR THIS STEP:**



## Prior knowledge:

In year 5, children have learnt to create and develop games following the principles in Scratch. They have considered simple coding and the function it has in the IT world. Programs linked to drawing, blogging and 3D landscapes have been explored.

## Key Vocabulary:

- Audience – people giving attention to something.
- Flyer – a small handbill advertising an event or product
- Platform – a standard for the hardware of a computer which determines what kind of software it can run.
- Promote – give publicity to something to increase sales, use and awareness.
- Rough cut – the first version of something (prototype)
- Unique selling point – something that stands out.

## The Journey

Activities include:

- Consider key marketing messages, including the unique selling point of the app.
- Develop and create a flyer or brochure to advertise and promote the app.
- Develop further awareness of the website to promote, advertise, market and display the app product.
- Working collaboratively with a partner or in a small group to produce a video

## The Final Piece

Outcome

A video and web copy to market and advertise fully the mobile phone app.

Parameters

- Must not be copied.
- Must include images and other media to enhance the app use on the flyer/ brochure/website etc.
- Should include a video promo.
- Must allow all members of the group to speak/share.

*See useful links 1 & 2 for ideas*

