

What sort of information solution can I make?

Read the tech news, talk to people around you, and look for areas in which you can either solve a problem or seize an opportunity that exists in real life. Consider your available timeframe when thinking about the scope/size of your project. Realistically consider your skills and what may be required during the development stage. Some sample ideas are presented below.

Inspiration

Some of these are ideas, while others are existing products already. Some may be achievable while others are too large to develop within the timeframe. Use these ideas to kickstart your imagination and idea search.

- Café which wants to take online orders
- Data analysis / visualisation of large amounts of aggregate data. Database, PHP to create visual graphs etc
- Booking system for borrowing multimedia equipment
- Someone who runs a home business, shoves receipts into a drawer, then has to process them for tax
- A roster for navy cadets
- A Family Day Care home business that needs to track the hours and charge for each child
- Basketball competition stats recorder – to output a ladder in a format to be uploaded into the website
- Something to help Student Council organise events
- Small business customers or sales
- Inventory of theatre costumes
- Landscaping app (for outdoor gardeners, painters, builders) that pulls weather data from the BOM Bureau of Meteorology's RSS feed into a calendar, to aid decision about which days to schedule outdoor work.
- Organisational needs in school, students/teachers/admin. Eg. Homework scheduling, meetings...
- Track driving hours for P platers - start/stop times, map, weather.
Would require a database, map data, optionally access the BOM RSS feed.
- Sports club (events, reminders, fees, score tables etc). Database w search
- Plant nursery app - enter type of plant, is it best in sun/shade/both... other care instructions etc to help people new to gardening to get the best from their plants. Database w search
- Something like the [Fire ready app](#) (Victoria), which maps & lists nearby fires, trucks attending, status. Draws in Google map data, accesses a database of fire situations in real-time. (This is an existing example)
- Women-only taxi service booking site eg [abc news article](#) Database, map (This is an existing example)
- Palm oil app [link](#) Identify products which are made with palm oil. Database w search (existing example)
- Price comparison app. Scan and compare prices, or compare gas/elect/water services.
Accesses a database, with search function based on your selected features. (an existing example)
- Barcode → nutritional info of products. Requires scanning ability, access database. (an existing example)

Format...

The format could be a web service, website, app, can access a database, xml data stream, or be a game... Consider opportunities and needs in regional centers as well as the city – communication needs, calculation, solutions to overcome distance between organisations, people, customers... Clubs, businesses organisations - find contacts in a local organisation.

Needs & solutions generated/addressed by students in previous years:

- a. Personal/Family Inventory e.g. hobbies, clothing (even theatre costumes), household possessions (eg for insurance), family share portfolio, heirlooms (items that have belonged to ancestors)
- b. Business Inventory (plant nursery, used car yard, craft supplies)
- c. Farm machinery maintenance (or School's computer hardware...)
- d. Bookings system for a local Veterinary Clinic. Staff could log in and make / see bookings. Could also maintain/include a customer database, so they could log in too.
- e. Website that shows all possible accessories for a camera/gopro from different manufacturers. The database of accessories can be searched by the sport or activity (eg. Watersports, snow, cycling...). Individual accessories have descriptions and links to the relevant manufacturer/seller. Allowed users to save their favourite accessories.
- f. Bookings system for a real estate agent to book photographers in to take promo shots of houses for sale
- g. Sports teams or athletes (your own, the school teams, etc) – digital roster/schedule
- h. Booking system for equipment that is rented out by an Audio Equipment company (or our Media dept)
- i. Quotations – a company is working these out on paper at the moment. Replace this with a digital work form that does calculations. Produces a report/ invoice.
- j. Multipurpose attendance checker – for events, churches, youth groups etc with customisable fields (like synergetic) with admin & user side.
- k. <https://form.jotform.com/60098143562960> Social impact game: All games must fall within the broad confines of being a game for change by addressing current and/or pressing social issues and aiming to produce a sustainable and positive impact on society and/or individuals.
- l. Invoice calculator for a small business
- m. Website for a company, which allows people to 'sign up' to a membership database to receive regular emails with information, news, tips etc. Admin login allows searching by position (eg CEO, accountant) and location (postcode).

Getting started

Identify a **need** or **opportunity**. If you identify a need: connect with local organisations or businesses, whom you can interview or gather data from later. (Opportunities are harder to collect data for.)

Requirements to include in your solution:



Must include the following requirements (based on the 2016 criteria, which may change a bit):

- Search function / ability to retrieve only some data based on criteria
- Uses a sorting algorithm for some data
- Validate data when inputting it (in a form)
- Store data (in a csv file, XML file or database)
As this can be considered a prototype, can store in data csv, with plan to later build a database.
- Consider security and accessibility of files