

COMP1710/6780

Web Development and Design

Week 3 8-12 August 2022



Want to be a class representative? Nominate today!

Please nominate yourself to your course convener (sabrina.Caldwell@anu.edu.au) by **9 August 2022**.

You are free to nominate yourself whether you are currently on-campus or studying remotely.

Class Student Representation is an important component of the teaching and learning quality assurance and quality improvement processes within the ANU College of Engineering and Computer Science (CECS). The role of Class Representatives is to provide ongoing constructive feedback on behalf of the student cohort to Course Conveners and to Associate Directors (Education) for continuous improvements to the course.

Roles and responsibilities:

- Act as the official liaison between your peers and convener.
- Be creative, available and proactive in gathering feedback from your classmates.
- Attend regular meetings, and provide reports on course feedback to your course convener
- Close the feedback loop by reporting back to the class the outcomes of your meetings.

We need two: One for COMP1710 and one for COMP6780



Content Types

Visual Conventions

Learning Styles

User Requirements



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Content Types

Text

Images

Audio

Video

Animations

Icons

Decorative detail

Backgrounds

Text

Most precise form of communication.

Communicate exact details. Names, materials, prices, quantities, instructions, emails, phone numbers, etc.

But:

Many people have little patience for extended text

(Usually) writing needs to be succinct and lively

Unlike in a book, text must be considered as a visual element in a webpage.

Images

File types you might use: .jpg, .png, .gif, .tiff

Considerations: lossy vs lossless, transparency vs opacity, animation



Whatever format you use, don't forget to optimise your images

Considerations: size to display, compression, linking to higher resolution images

Unoptimized images slow down websites = bad user experience, lower ranking in Google searches, less inquiries and customers.

Audio

Usually .mp3 files, but may also use .wav, .aac, .WebM, or .ogg formats

Considerations: streaming vs streaming, file size, for example wav audio files are not compressed so tend to be big and load slow. Also licensing requirements may kick in for .mp3s at large scale (but not a problem in this course). Browser support can be variable.

How to use:

- Podcasts
- Short audio clips
- Longer audio clips for download (recitations, original songs, etc.)

How not to use:

- Background music
- Interface cues

Both of these uses get old quickly for users, who (generally speaking) dislike them

Animations

Often like something in between an image and a video.

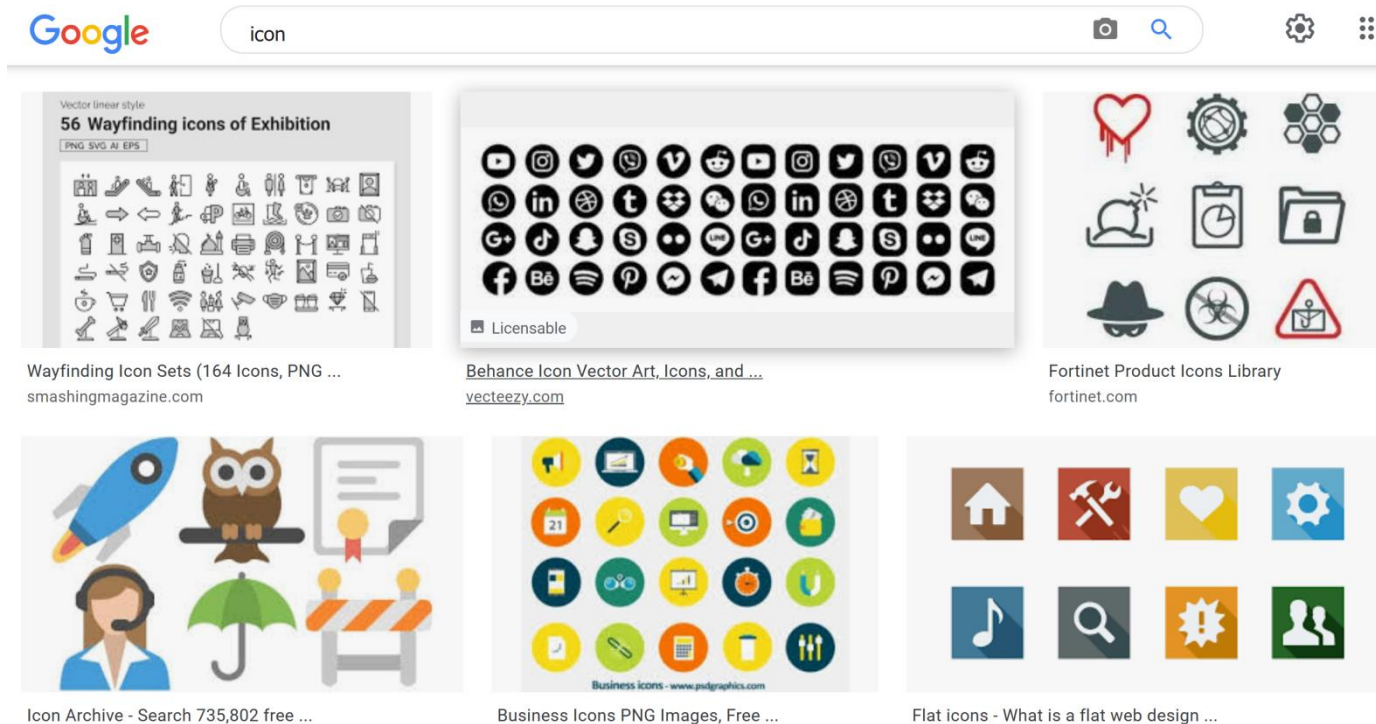
Can be small and simple or elaborate.

Remember size and consider whether it is worth it!

<http://clipart-library.com/free-gif-animation.html>

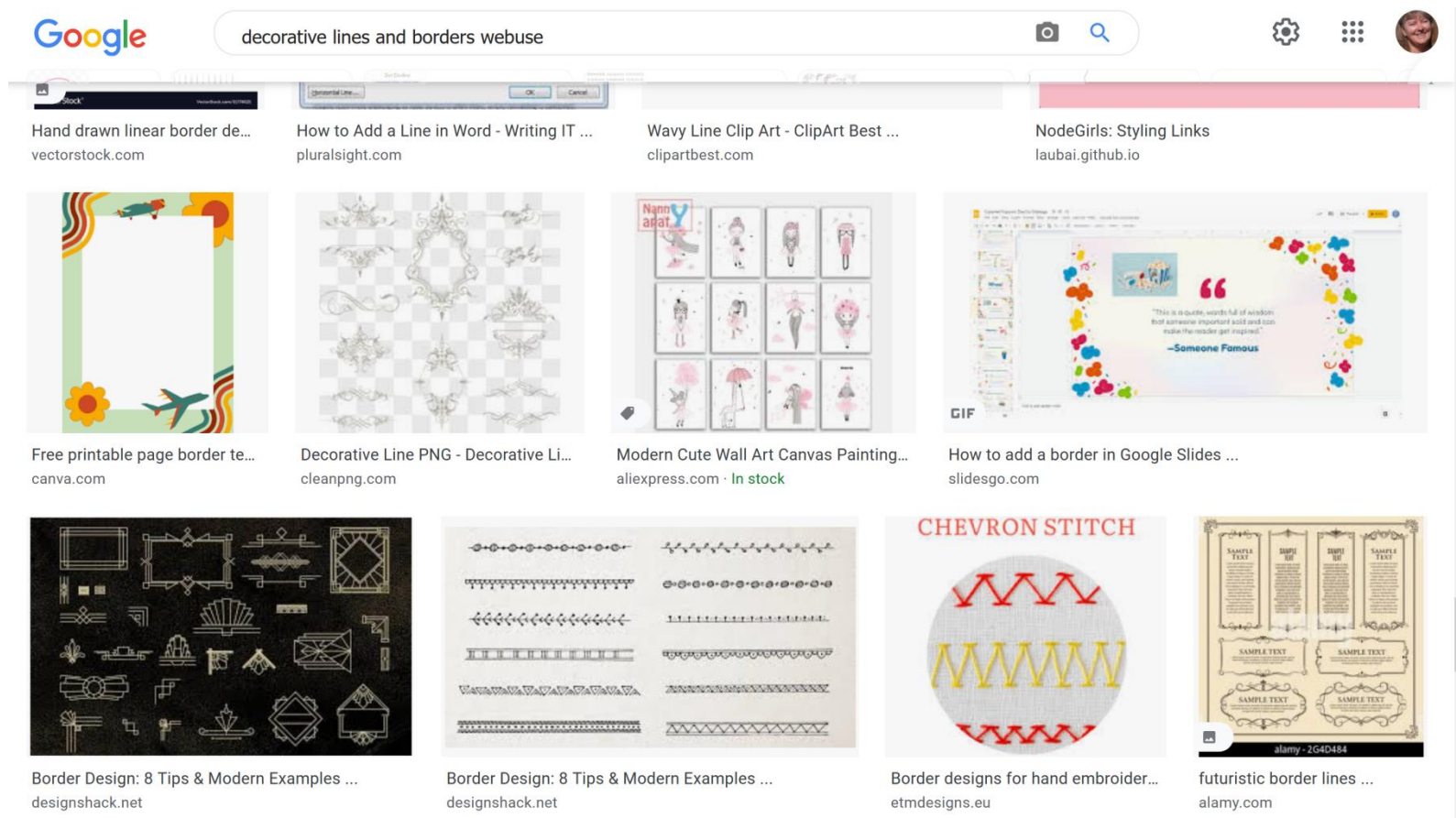
Icons

There is an icon for every purpose – or you can make your own!

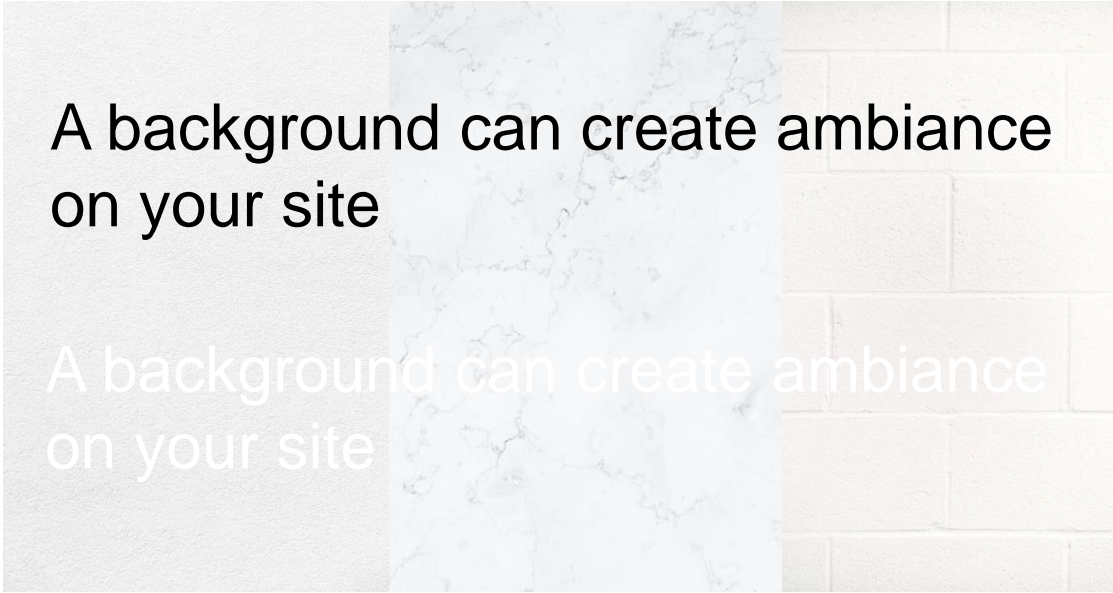


Decorative details

Often you will want to define certain areas of your website. Lines and borders can be a good option. Like icons, there are many of these available:




Backgrounds



A background can create ambiance
on your site

A background can create ambiance
on your site

White texture backgrounds



But beware; they can
have implications for
your other content!

But beware; they can
have implications for
your other content!

Purple texture backgrounds



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Visual Conventions in our daily (offline) lives

When driving...



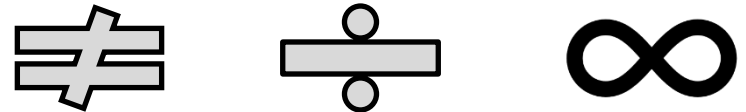
In public places...



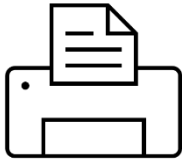
In a comic book...



In math ...



Visual Conventions in our daily online lives



Visitors to your site come with pre-existing knowledge



They know how to 'read' certain pictures

They have an expectation of how to navigate your site

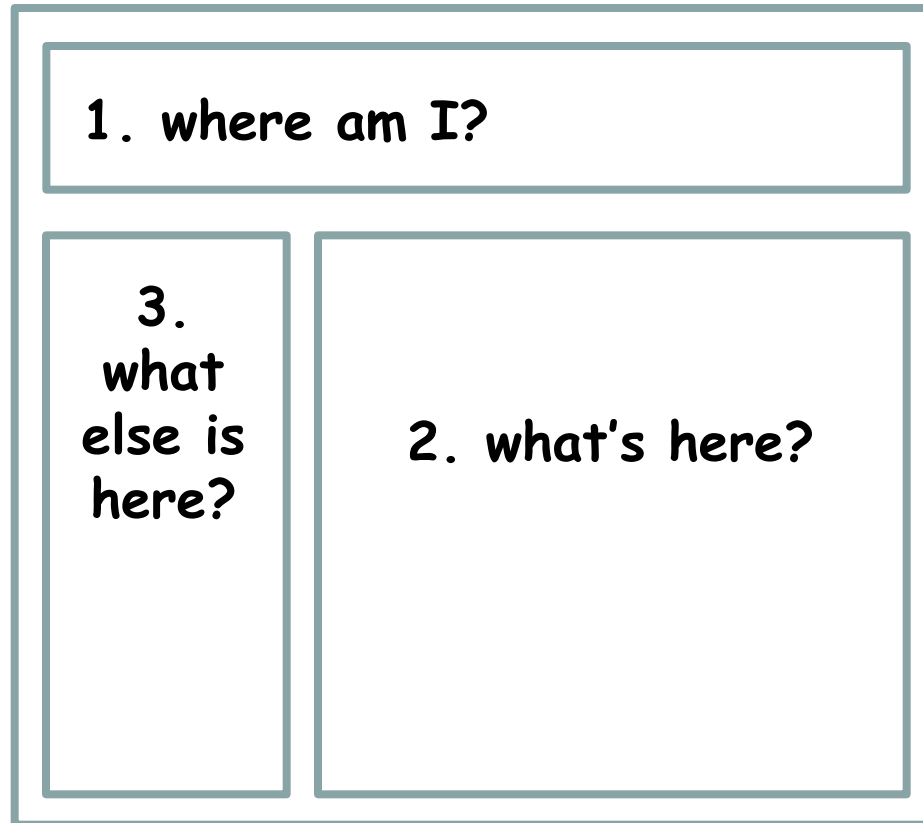


<http://clipart-library.com/free-gif-animation.html>

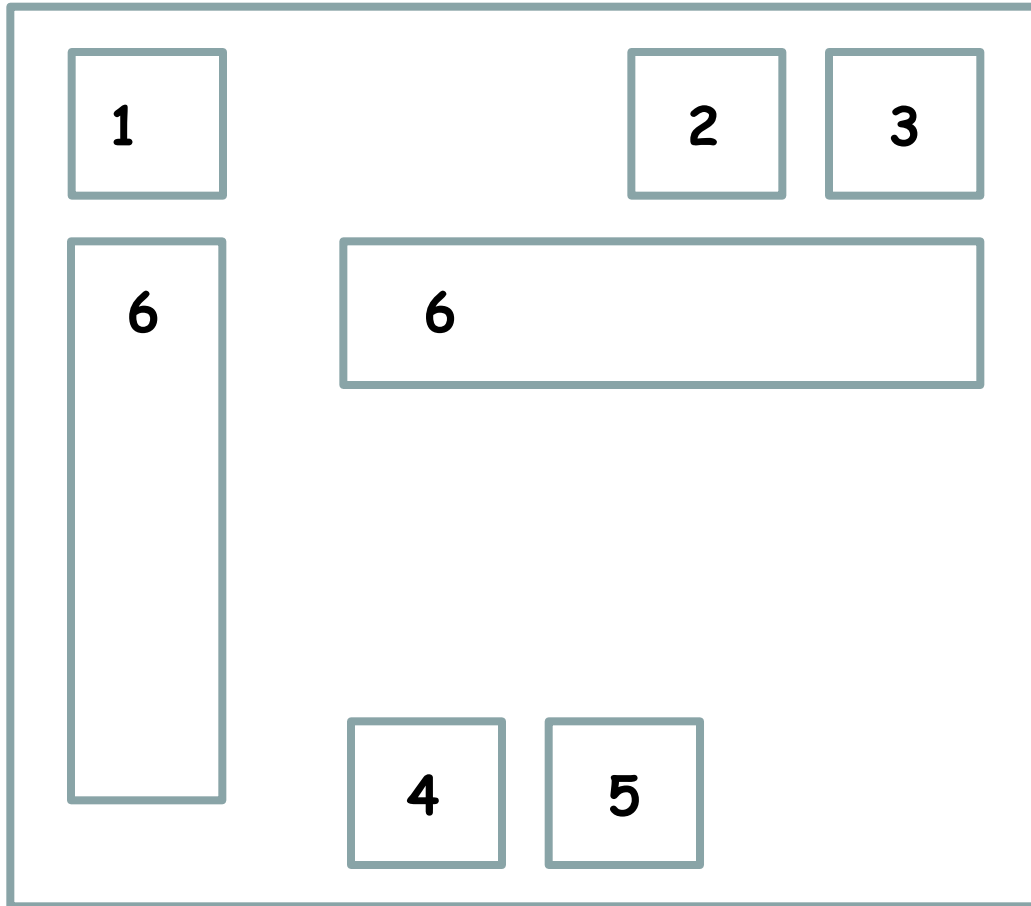
They expect this to
be a link, not just an
underline



Common website page layout



Where visitors to your site expect things to be



1. Logo, leading back to front door
2. Shopping cart, leading to check-out
3. Help
4. About us
5. Contact us
6. Site navigation bars



Content Types

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V Visual

A Aural/auditory

R Read/write

K Kinesthetic

.... and multi-modal



CALDWELL8573

V Visual

Prefer:

Depiction of information in **maps, charts, graphs, flow charts, labelled diagrams**, and all the **symbolic arrows, circles, hierarchies and other devices**, that people use to represent what could have been presented in words.

It does **NOT** include still pictures or photographs of reality, movies, videos.

It does include **designs, whitespace, patterns, shapes** and the different formats that are used to **highlight and convey information**.

V Visual

To take in information:

- use pictures, videos, posters, slides where the emphasis is on the design (not the sound or the words or the content).
- use maps and free-drawn plans.
- use books with diagrams and pictures.
- use flowcharts, decision trees, family trees, organizational charts, graphs.
- turn tables of figures into graphs.
- read the words and convert them into your own-designed diagrams.
- use different fonts, UPPER and lowercase letters, underlining, **different colours**, and highlighting.
- use symbols @, #, & and white space; the extra spaces between text and diagrams.
- try different spatial arrangements on the page.

V Visual

To present information to others:

- Construct images in different ways. Try spatial arrangements.
- Draw things to show your ideas, using diagrams, symbols and graphs.
- Make complex processes and lists into flowcharts.
- Make each page look different.
- Be aware that others may NOT have a Visual preference like you. Respect their differences. Find the preferences of those you are presenting to, and learn to be multimodal and deliver something in their preferred modes.

A Aural/auditory

Prefer information that is “*heard or spoken.*”

Learners who have this as their main preference report that they learn best from lectures, group discussion, radio, email, using mobile phones, speaking, web-chat and talking things through.

The Aural preference includes talking out loud as well as talking to oneself.

Often people with this preference want to sort things out by speaking first, rather than sorting out their ideas and then speaking. They may say again what has already been said, or ask an obvious and previously answered question. They have need to say it themselves and they learn through saying it – their way.

A Aural/auditory

To take in information:

- Join or set up discussion groups. Discuss topics with others. Argue your case.
- Comment on ideas as soon as you get an opportunity. Repeat information to others and use your voice to show your emphases.
- Explain new ideas to other people. Check out their ideas with yours.
- Listen to your own self-talk, have conversations with yourself.
- Use voice recorders, listen to podcasts.
- Shift any pictures and graphs into talk and chat.
- Pay attention when others are speaking. You sometimes pretend to listen while preparing your response.

A Aural/auditory

To present information to others:

- Listen and talk, but also learn the best times to do each of these.
- Find others who like to listen and talk.
- Join online chat and discussion groups and make your contributions; use email, blogs and Twitter to chat with others.
- Use your mobile phone for conversations.
- Realize that others can sometimes improve on what you say.
- Be aware that others may NOT have an Aural preference like you, so respect their differences. Find out the preferences of those you are presenting to, and learn to be multimodal and deliver something in their preferred modes.

R Read/write

Prefer information displayed as **words**.

Not surprisingly, many teachers and students have a strong preference for this mode. Being able to write well and read widely are attributes sought by employers of graduates.

This preference emphasizes **text-based input and output** – reading and writing in all its forms but especially **manuals, reports, essays and assignments**. People who prefer this modality are often drawn to **lists, diaries, dictionaries, thesauri, quotations and words, words, words...**

R Read/write

To take in information:

- use lists (like this one!)
- use titles and headings that clearly explain what follows.
- use bullet points and numbered paragraphs.
- use dictionaries and glossaries, articles about trends in word usage.
- spell-check; correct written language errors.
- read handouts.
- read books that are dense with text, essays, manuals, reading lists.
- use definitions, constitutions, legal documents, minutes and rules.
- write notes (often verbatim).
- get information from people who use words well and have lots of information in their sentences.
- as you listen, sort out what they are saying into your own categories and lists.

R Read/write

To present information to others:

- Order things into priorities of importance, or categories, or schemas...
- Contribute in print to a variety of print media.
- Rewrite any ideas and principles in your own words.
- Be aware that others may not have a Read/Write preference like you, so respect their differences.

K Kinesthetic

This preference refers to the “**perceptual preference related to the use of experience and practice (simulated or real).**”

The key is that people who prefer this mode are connected to reality, “either through concrete personal experiences, examples, practice or simulation” [See Fleming & Mills, 1992, pp. 140-141].

It includes **demonstrations, simulations, videos and movies of “real” things, as well as case studies, practice and applications.**

People with this as a strong preference learn from the experience of doing something and they value their own background of experiences and less so, the experiences of others.

Augmented reality, virtual reality, interactivity

K Kinesthetic

To take in information:

- use all your senses – sight, touch, taste, smell, hearing...
- use hands-on approaches.
- read case studies.
- watch videos, especially those that show real things.
- look at exhibits, samples, photographs....
- attend laboratory and practical sessions.
- use surveys, field trips and interviews.
- use recipes and solutions to problems.
- take notice of real-life examples and personal stories.
- look for examples of principles.
- learn by trial and error.
- look for opportunities to apply what you have learned.
- use actions to help your understanding.

K Kinesthetic

To present information to others:

- Focus on the “*real*” things that happened; reality is what is important.
- Use plenty of examples when you talk, discuss, present or write.
- Use your previous experience as the basis for any decision-making.
- Use case studies and applications to help with difficult principles and abstract concepts.
- Get others to focus on the detail. Use detail to argue against principles or abstract ideas.
- Stay in *this world* and in *this time*. **Now** is where you want to be.
- Be aware that others may NOT have a Kinesthetic preference like you, so respect their differences. Find the preferences of those you are presenting to, and learn to be multimodal and deliver something in their preferred modes.

MM Multimodality

VARK Type One – content specific preferences

Flexible in their communication preferences and switch from mode to mode depending on what they are working with. They are context specific. may have two, three or four almost-equal preferences in their VARK scores

VARK Type Two – require information input/output in all their preferred modes

Not satisfied until they have had input (or output) in all of their preferred modes. Take longer to gather information from each mode and, as a result, they often have a deeper and broader understanding. They may be seen as procrastinators or slow-deliverers but some may be merely gathering all the information before acting – and **their decision making and learning may be better because of that breadth of understanding.**

VARK Transition – somewhere between the two above



Content Types

Visual Conventions

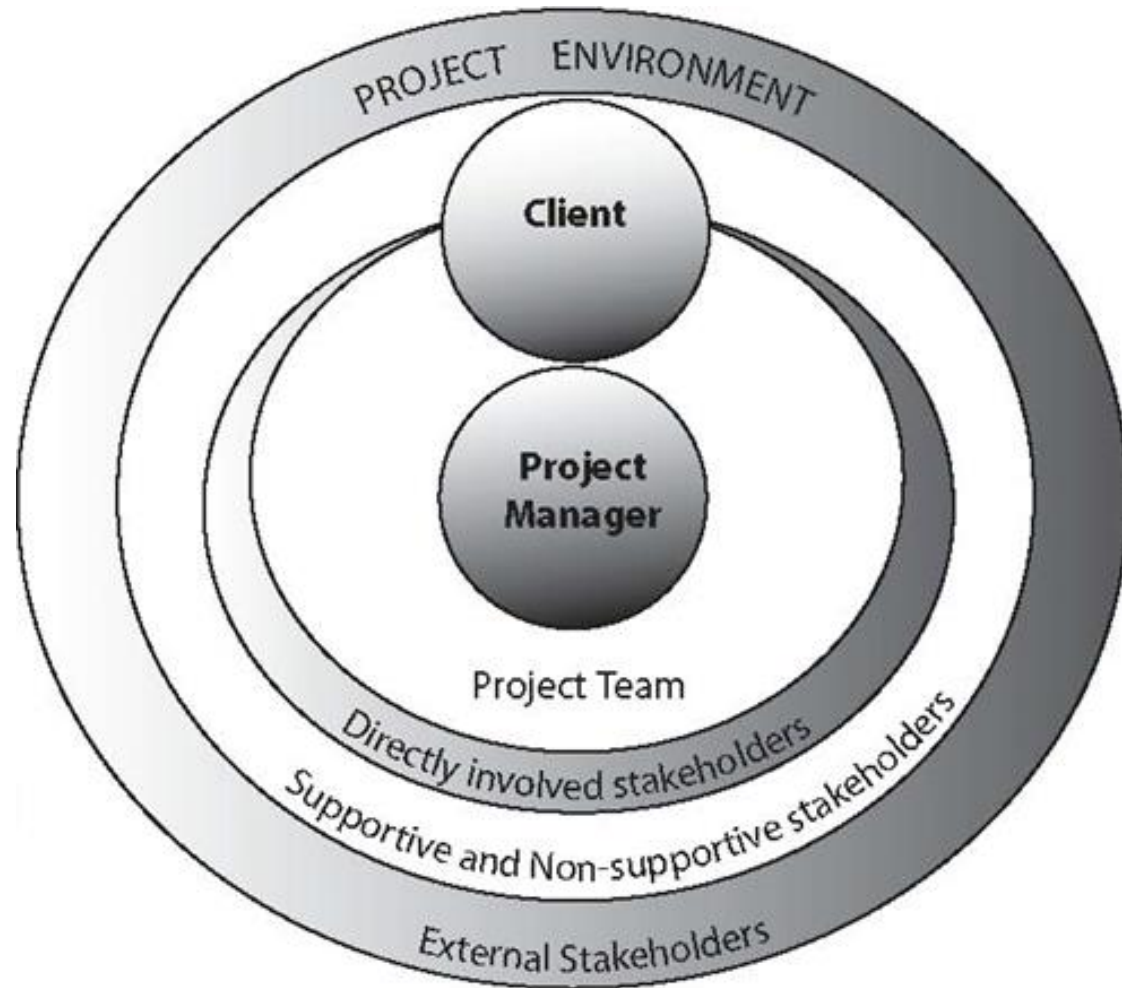
Learning Styles

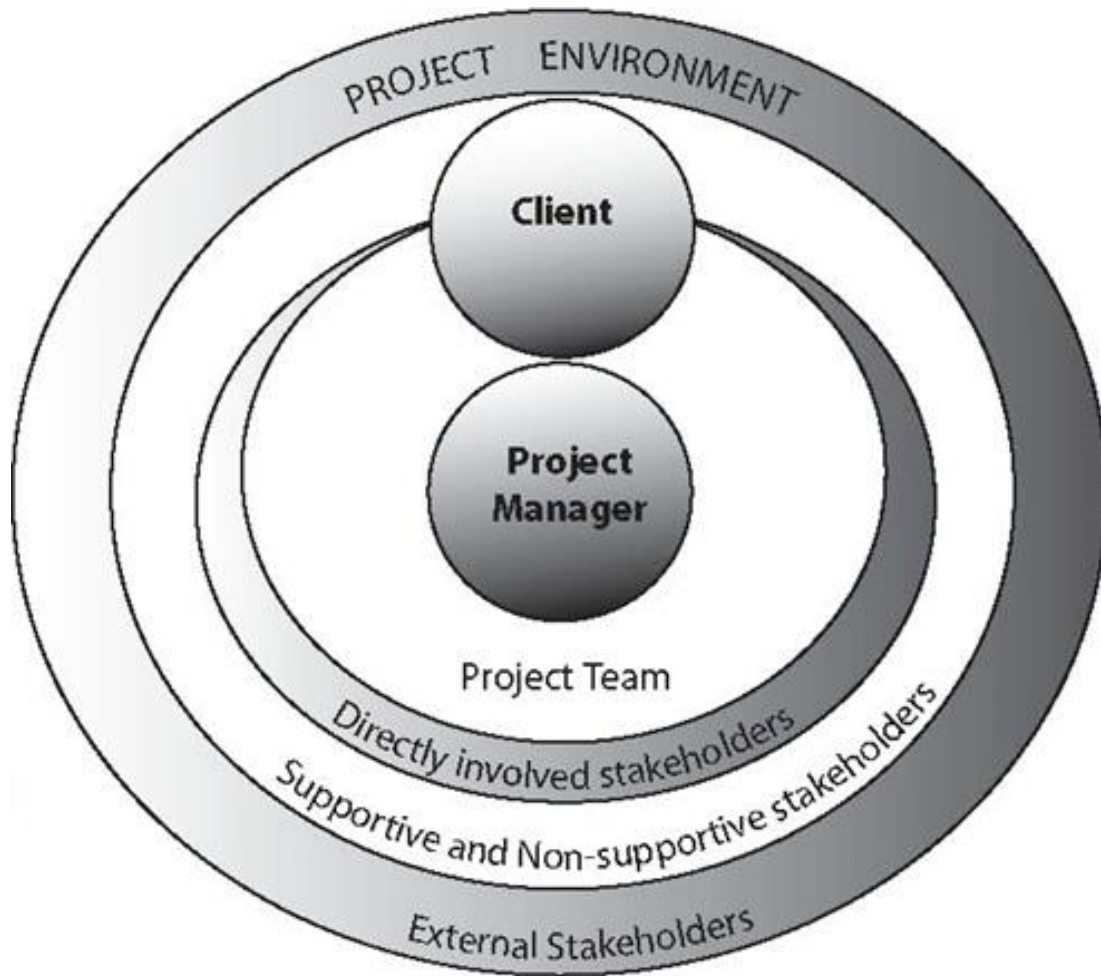
User Requirements

Q: What does the term 'stakeholder' mean?

Directly involved:

- Originator
- Owner
- Sponsor
- Functional managers
- Contracts
- Suppliers
- Support companies
- Users
- Customers





External Stakeholders

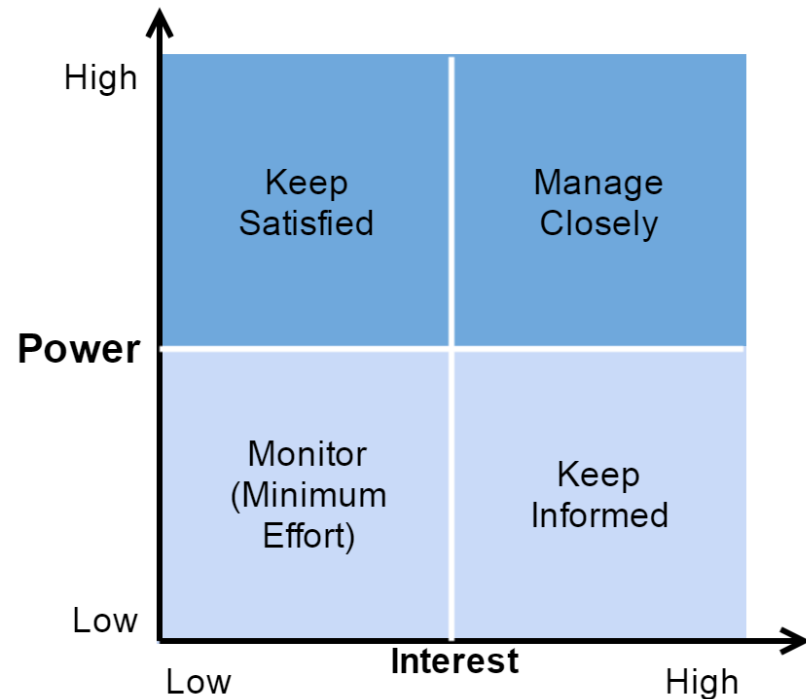
(who may not be directly involved)

- Regulatory authorities
- Unions
- Special interest groups – society at large
- Lobby groups
- Government agencies and media outlets
- Individual citizens

Communicating with users and stakeholders matters!

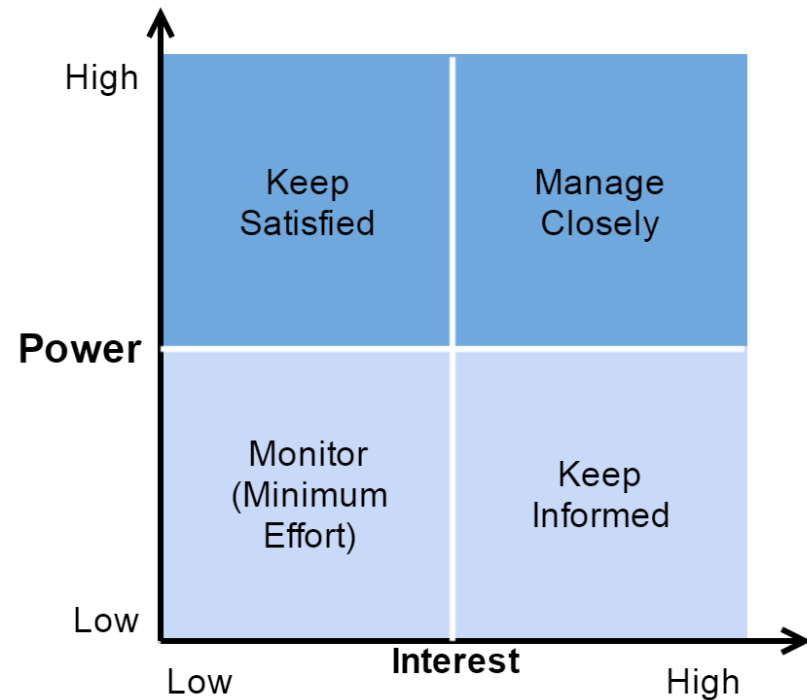
High power, interested people: these are the people you must fully engage and make the greatest efforts to satisfy.

High power, less interested people: put enough work in with these people to keep them satisfied, but not so much that they become bored with your message.



Low power, interested people: keep these people adequately informed, and talk to them to ensure that no major issues are arising. These people can often be very helpful with the detail of your project.

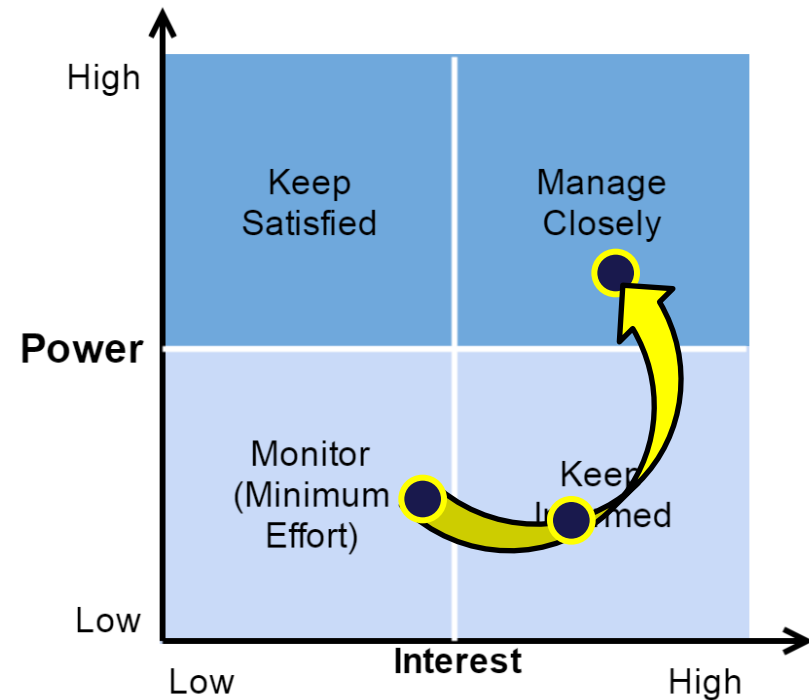
Low power, less interested people: again, monitor these people, but do not bore them with excessive communication





User requirements

Don't forget that people can move between quadrants during your project!



Have fun in the labs and...

Remember to submit your topic

Start assembling the content you think you'll want to use

Don't forget to complete MOOC 3 in the labs or in your own time but do complete them and remember the quizlets are part of your marks – this week they close on 14th August 11:55pm

... see you tomorrow!