

GLOSSARY (KEYWORDS)



9.1

Keyword	Definition
Functionality	The quality of having a practical use
Visual identity	a combination of graphic elements that represent and identify a brand
Transparency	An image that is clear and can take the effect of any images behind it
Asset	Component parts that are used in the creation of the digital graphics
Implement	Put into effect
Event driven	Use triggers to make something happen
Debug	Identify and remove errors
Variable	a piece of memory that stores a value that can be changed

9.2

Keyword	Definition
Data Type	Interpreting a value
Boolean	True or False
Integer	Whole Number
Float/Real	Decimal Number
Character	Single character such as 'K'
String	A sentence created in programming between speech marks
Truth Table	Determine the inputs and outputs of a Logic Gate
Testing	Checking for errors

GLOSSARY (KEYWORDS)



9.3

Keyword	Definition
Sequence	Following steps in order
Selection	Making a decision
Iteration	Repeating a number of steps
Programming	The process or activity of writing computer programs
Debug	Identify and remove errors
Variable	a piece of memory that stores a value that can be changed

9.4

Keyword	Definition
Client Brief	A written document or verbal discussion that outlines the key requirements of a project.
Written Media Code	The use of language and how it's communicated with the audience, written or spoken
Convention	A way in which something is usually done
Storyboard	A visual representation of how scenes look
Concept sketch	used to convey the basic idea or concept of a design

9.5

Keyword	Definition
Mind map	visual tool to generate and link ideas
Wireframe	Used to design the layout and functionality
Hyperlink	A link to another page or website
Property	special attributes or characteristics associated with an object

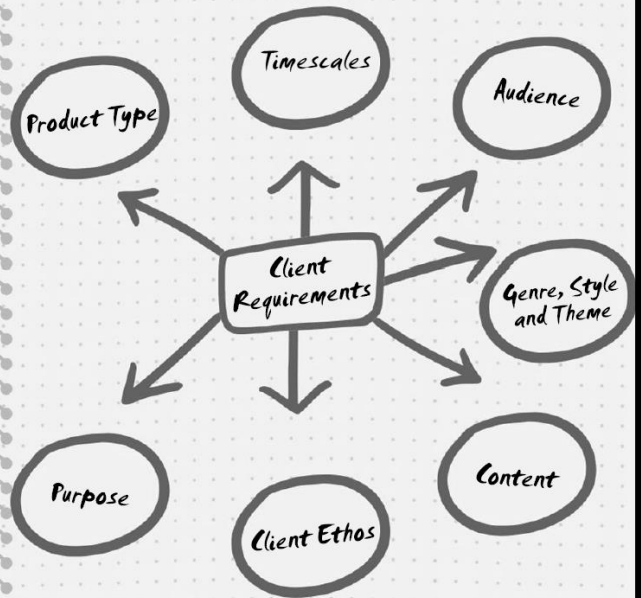
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9.1

Client Brief and Requirements

- ☆ **Client**
Person who has asked you to create a product
- ☆ **Brief**
Written document that provides you with the client requirements.
- ☆ **Requirements**
What is needed for the task to be signed off by the client as complete
- ☆ **Collaboration**
Key people will meet to discuss and produce the final client brief – meetings may be formal or informal, face to face or via video conferencing
- ☆ **Constraints**
Limitations or restrictions within the brief e.g. time constraints may be "2 months for design".

Client requirements provided in the brief usually include:



MOOD BOARDS

Purpose: visual tool to generate ideas

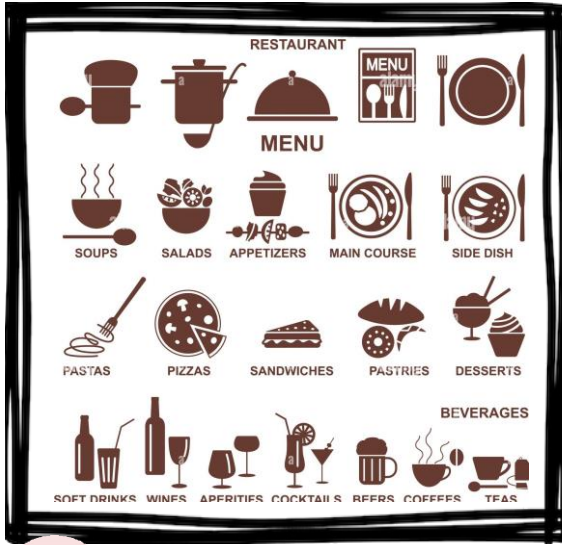
Content:

- Images
- Colours
- Fonts
- Sound
- Video
- Material



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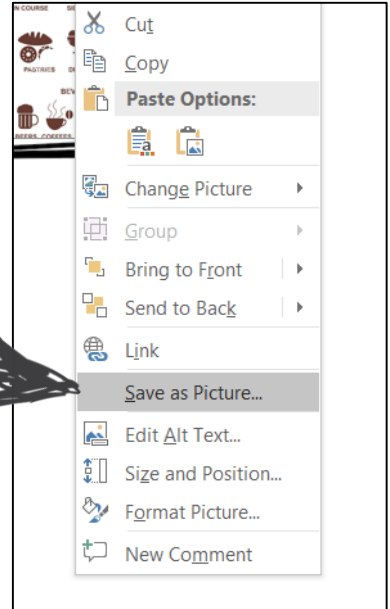
9.1



App icons are used as a main menu to allow the user to navigate to another page

SAVE AS PICTURE

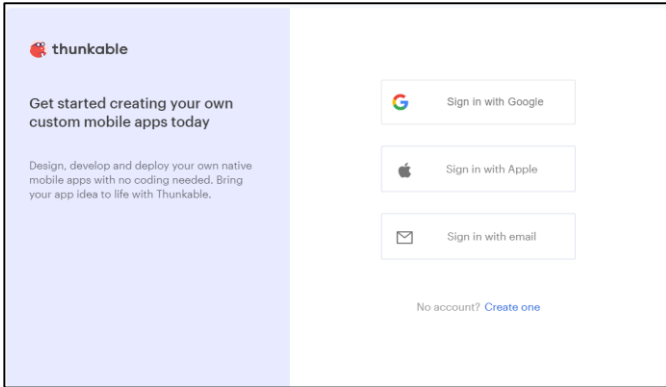
Right click → Save As picture and save each of your icons as an image



What is Thinkable?

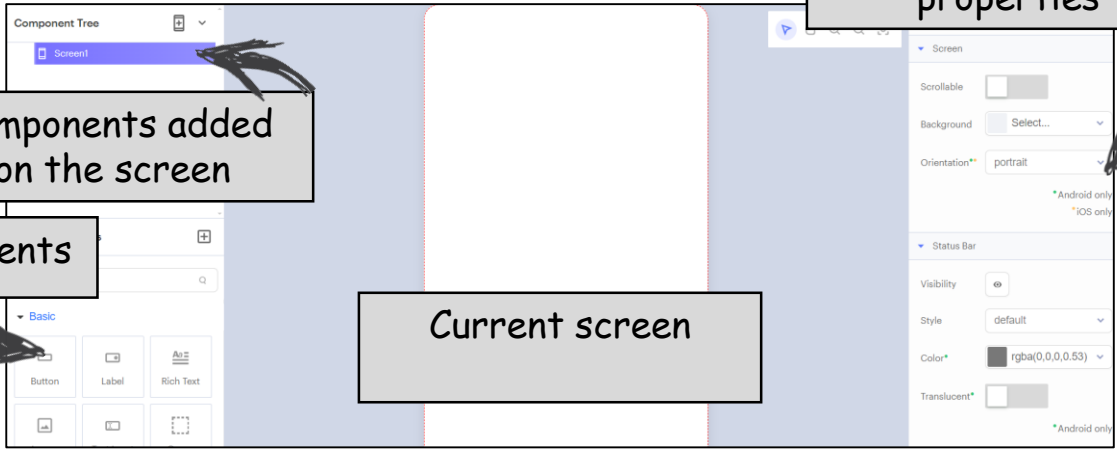
Thinkable is a web-based application that allows you to create apps.

Signup process



To start, you will click on Create one. When you log in, you choose Sign in with your school email and it will email you a link.

Component properties



Components added on the screen

Components

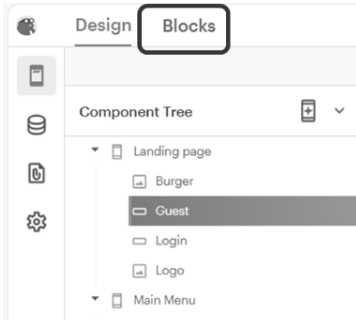
Current screen

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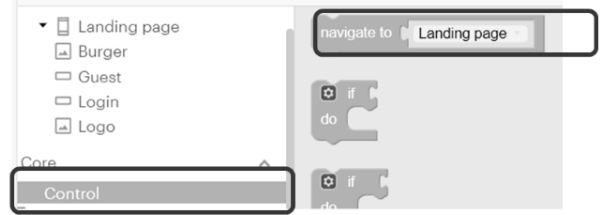
9.1

EVENT DRIVEN PROGRAMMING

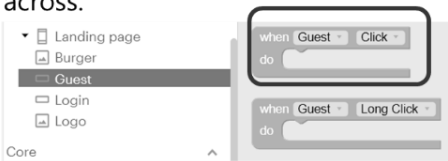
Step 1: Make sure you are on your landing page and select Blocks.



Step 3: Select the control tab and drag the first block across.



Step 2: Select the Guest button and drag the first block across.



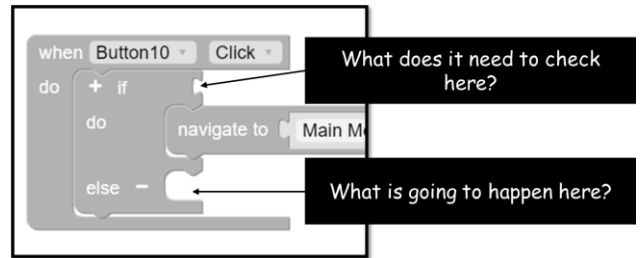
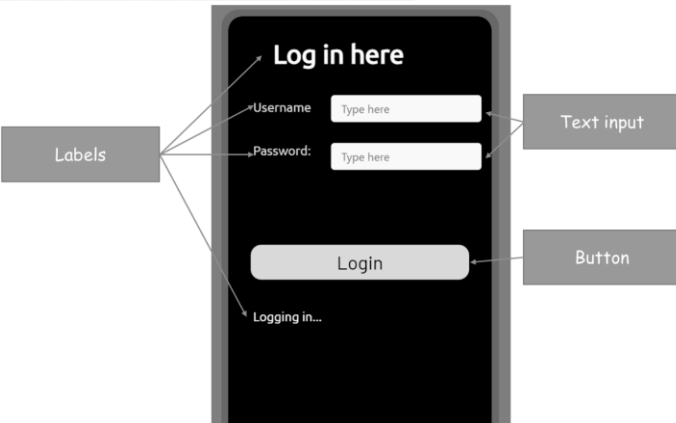
Step 4: Connect them together like shown below.



If it doesn't look like this then it might be because you've named your buttons and screens differently.

LOGIN SCREEN

ADD AN EXTRA SCREEN



The code:



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9.2

Integer
Whole numbers

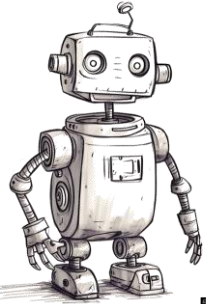
String
Alphanumerical

Char
A single character

DATA TYPES

Float/Real
Decimal number

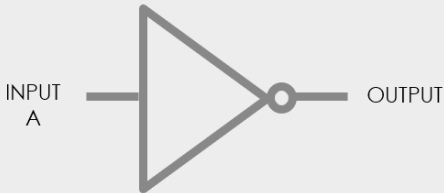
Boolean
Two possible outcomes



LOGIC GATES

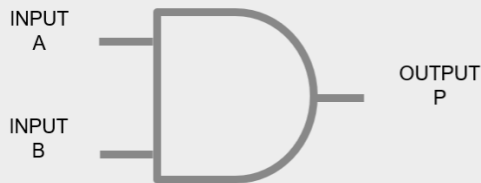
Binary Logic – NOT gate

- If 0 is input it outputs 1
- If 1 is input it outputs 0



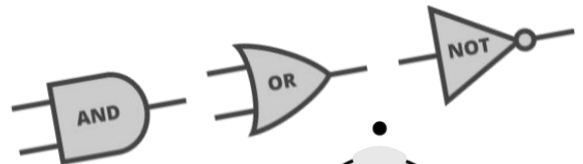
Binary Logic – AND gate

- If both inputs are 1 then the output is 1
- Otherwise the output is 0



Binary Logic – OR gate

- If either input is 1 then the output is 1
- Otherwise the output is 0



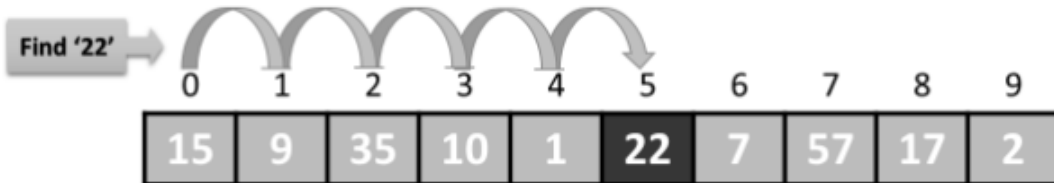
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9.2

SEARCHING ALGORITHMS

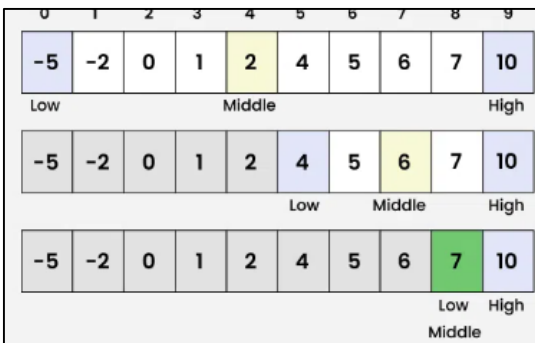
Linear search

A linear search requires going through each item in the list, one by one



Binary search

Divide and conquer - the list has to be sorted in alphabetical order



Always compare the middle number



TRACE TABLES

Used to determine the output from a program, and to find errors in programs

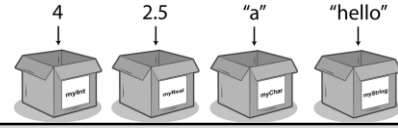
```
num = 3
n = 0
while n < 4
    num = num + n
    n = n + 1
endwhile
output (num)
```

num	n	n < 4	OUTPUT
3	0	TRUE	
3	1	TRUE	
4	2	TRUE	
6	3	TRUE	
9	4	FALSE	9

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9.3

VARIABLE



- A variable is used to store a piece of data that may be needed later in a program (memory location)
- This variable **can be changed** throughout the program running

PYTHON – OUTPUT

```
1 # Write your code here :-)  
2 print ("Hello world")
```

Make sure you DO NOT
put a capital

Speech marks and
brackets



Running: hello.py

```
Hello world  
>>> |
```

HELLO
WORLD

Checklist:

- Have you spelt **print** correctly?
Python is case-sensitive: using capitals makes a difference.
- Have you used (opening and closing) round brackets around the message to be displayed?
- Have you used (single or double) quotation marks around the message to be displayed?

PYTHON – USING VARIABLES

Hello world with a variable

```
msg = "Hello world!"  
print(msg)
```

```
user = "Bob"  
print ("Hello", user)  
lucky = 13  
print ("My lucky number is", lucky)
```

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PYTHON – SELECTION

9.3

```
name = input("What's your name?")
if name == "Rebecca":
    print("Cool name!")
else:
    print("Hello", name)
colour = input("What is your favourite colour?")
if colour == "blue":
    print("That is mine too")
elif colour == "red":
    print("That is horrible")
else:
    print("I don't mind", colour, "either")
```

Use elif for more than two conditions - you could have as many 'elifs' as you want BUT must always start with IF and end with else



PYTHON – ARITHMETIC

+	addition
-	difference
*	multiplication
/	division
//	integer division
%	remainder of integer
division	
**	exponentiation

```
1 print (2 * 3)
2 print (20/5)
3 print (15%4)
```

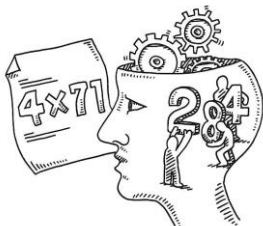
multiplies

Divides

Remainder

==	equal to	a == 1	Does a equal 1?
!=	not equal to	b != c	Are b and c different?
<	less than	d < 3	Is d less than 3?
<=	less than or equal to	d <= 3	Is d at most 3?
>	greater than	d > 10	Is d greater than 10?
>=	greater than or equal to	d >= 10	Is d at least 10?

```
1 birth_year = input("Year of birth?")
2 current = input("Year of last birthday")
3 age = current - birth_year
4 print("You are", age, "years old")
```



```
film = input("What is the best film ever?")
if film != "BFG":
    print(film, "is not too bad")
else:
    print(film, "is my favourite too!")
```

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9.3

PYTHON – ITERATION

Iteration in programming means repeating steps, or instructions, over and over again. This is often called a 'loop'.

```
1 answer = input("What is the capital of France?")
2 answer = answer.title()#This changes the answer to have a capital
3 while answer != "Paris":
4     answer = input("incorrect, What is the capital of France?")
5     answer = answer.title()
6 print ("Well done you got answer 1 correct")
7
8
9 answer2 = input("What is the capital of Spain?")
10 answer2 = answer2.title()
11 while answer2 != "Madrid":
12     answer2 = input("incorrect, What is the capital of Spain?")
13     answer2 = answer2.title()
14 print ("Well done you got answer 2 correct")
15
```

Running: hello.py

```
What is the capital of France?paris
Well done you got answer 1 correct
What is the capital of Spain?madrid
Well done you got answer 2 correct
^^^
```



No	Code	Explanation
1	<ul style="list-style-type: none">Name = "Bob"N = input("Enter name")while N != Name:<ul style="list-style-type: none">print("Incorrect name")N = input("Enter name")print("That is correct")	The loop will only end if you enter Bob.
2	<ul style="list-style-type: none">Word1 = "Blue"Word2 = "Pen"w1 = input("Enter first word")w2 = input("Enter second word")while w1 != Word1 and w2 != Word2:<ul style="list-style-type: none">print ("Try again")w1 = input("Enter first word")w2 = input("Enter second word")print("Well done")	If the user does NOT enter Blue as the first word and Pen as the second word, it will ask you to try again. If one of the words is entered correctly then it will print well done.

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9.4

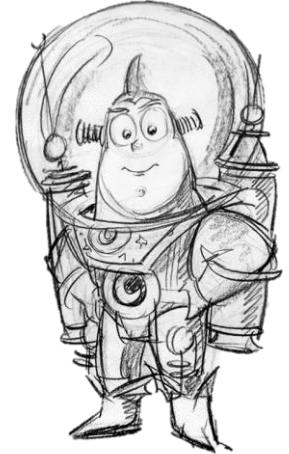
PLANNING TECHNIQUES

CONCEPT SKETCH

Purpose: used to convey the basic idea or concept of a design, usually drawn freehand

Content:

- Image
- Font
- Size
- Colours



STORYBOARDS

Purpose: provide a visual representation of each panel and illustrate the sequence of events that occur.



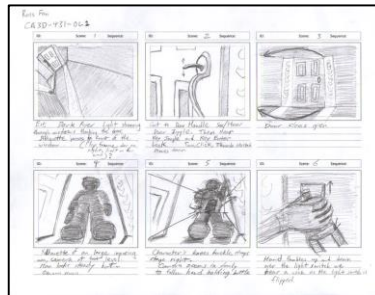
EXT: Meadow
Light music playing

Wide Angle
SFX: Birdsong

10 s

Content:

- Scene content
- Scene number
- Timing
- Camera shots
- Camera angles
- Sound effects
- Location



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COMIC CONVENTIONS

9.4

Design and layout

Colours
The colour can determine the genre/theme of the comic book. For example, Blue and grey could connote fantasy.

Focal points
This is the main element on each panel which allows the reader to follow.



▲ Use of onomatopoeia



▲ Speech/thought bubbles



▲ Narration Captions



Environment/Background
The background or props used within in the environment itself helps to set the mood and atmosphere as well as contributing to the narrative.

Typography
This is all about the font style chosen for the comic. The style of text chosen can be different as you can see above.

Storyline

Panels
A panel is a contained element in a comic strip that illustrates what is happening in that scene. The size, shape and flow can depend on the comic and the narrative.



▲ Typical layout of panels in a comic strip

Splash page
This is where the whole page of the comic is made up on one panel. This could be used to establish a character.



▲ Splash page

Spread
This is an extended splash page that spread double-sided or across two pages on a comic strip. (See example on the far right)



Double-page spread of a comic strip. This is another way to create a splash page



COMIC LIFE

Comic pages

Change font style

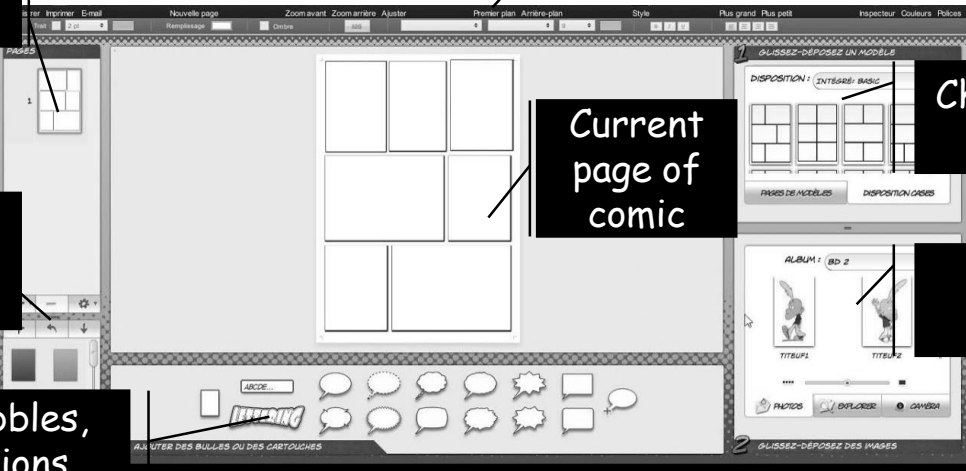
Background styles

Current page of comic

Change panel style

Speech bubbles, text, captions

Insert images

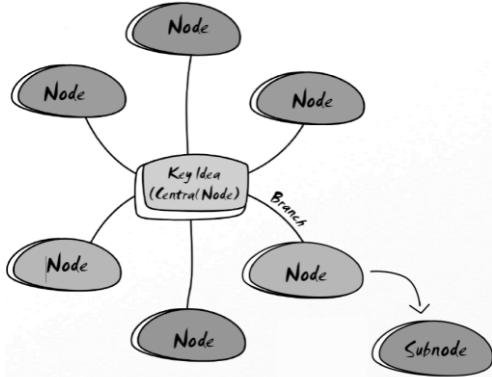


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9.5

PLANNING TECHNIQUES

MIND MAPS



Purpose: visual tool to generate and link ideas

Content:

- Central idea
- Keywords
- Branches
- Sub-branches
- Images (sometimes)

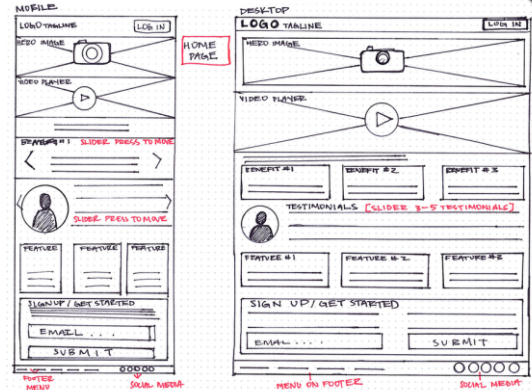


WIREFRAMES

Purpose: Used to design the layout and functionality

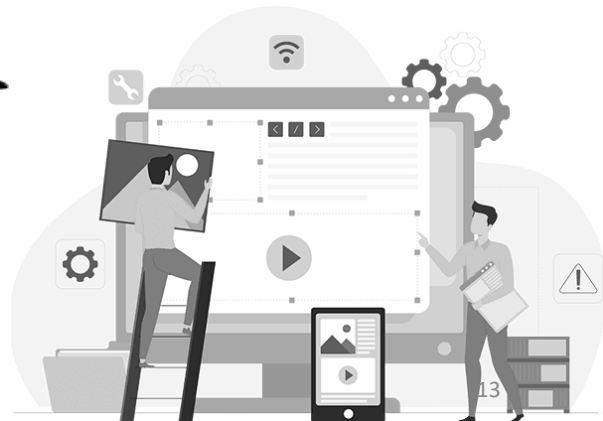
Content:

- Shapes
- Lines
- Annotations



WEBSITE SUCCESS

- Consistent house style
- Working hyperlinks
- Relevant images
- Contrasting colours
- User friendly
- No SPAG mistakes



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9.5



https://www.ambiera.com/rocketcake/tutorial01_responsive_website.html

Properties:
Used for changing the appearance of your page/selected asset

Toolset:
This where you find everything you need to add to your website (images, navigation etc)

ADDING A NAVIGATION MENU

Adding a navigation menu

Insert hyperlink

Link to page in this project

Select website
Please select a website to link

- Unsaved Website
 - index.html
 - Shop

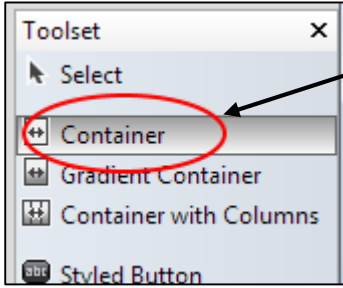
Link:
Link:
URL:
Target:

OK Cancel

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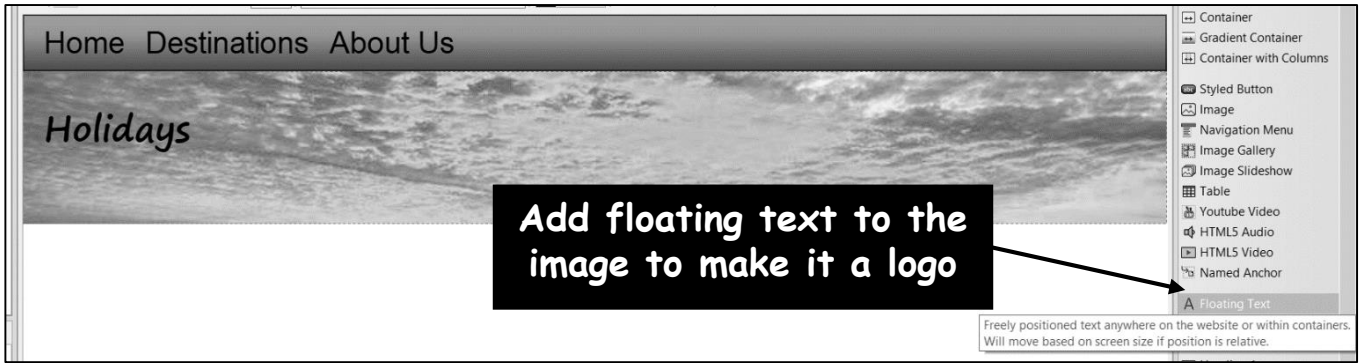
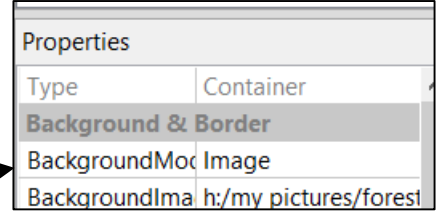
9.5

ADD A HEADER

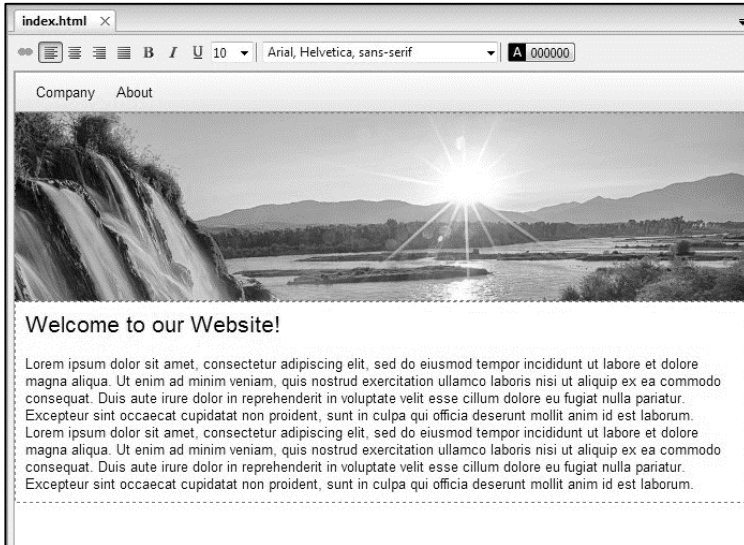


Add a logo image to the page

Change the mode to image

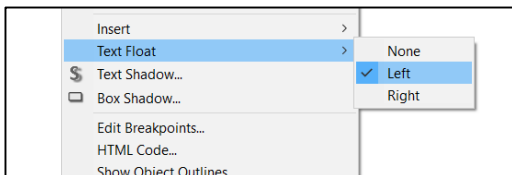


ADD CONTENT



Insert container

Insert image and click onto the text



Right-Click the image, and in the menu, select "Text Float -> Left", in order to make the text float around the image.