

USING OUR 2D DEFOLD GAMES TUTORIALS

This is a sample of the Craig'n'Dave Defold resources for you to try. Two tutorials are included in this sample. More tutorials are available in the full version for CnD members.

The tutorials are presented as a mini-website, so you will need to be able to put these files on a shared drive for students to access and enable JavaScript. They will not work on Google classroom and other platforms.

You are not permitted to put these resources on a public website or other file sharing platform and they remain the copyright of CraignDave Ltd. You may host them internally providing they are behind a password wall.



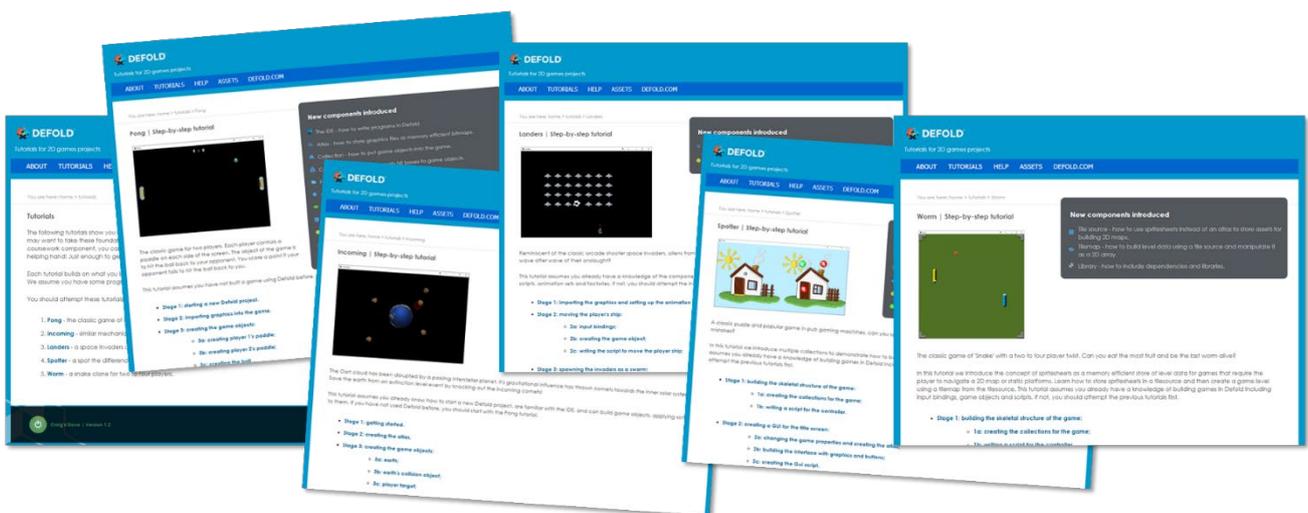
To get started open the tutorial website folder and double click 01-homepage.html

These tutorials have been used by hundreds of students to learn Defold and Lua independently from their teacher, so we know they work! If your code does not work, check back through the tutorial very carefully!

For those students studying OCR H446, we have a paperback book available from Amazon and a PDF version included with a CnD membership explaining how to document a unit 3 programming project made with Defold.



<https://www.amazon.co.uk/Documenting-Programming-Projects-Computer-Science/dp/B08B3335D3>



Additional resources

Don't forget a premium subscription comes with full access to ALL UNITS / TOPICS as well as all our additional resources, these include:

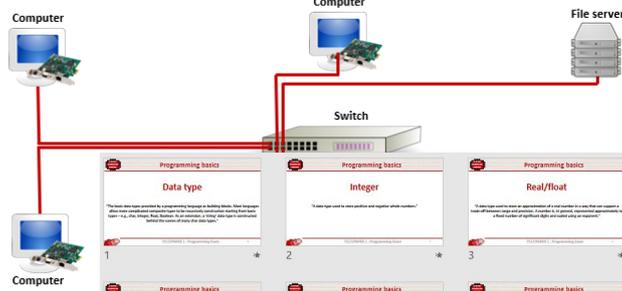
- Programming resources (Python, C#, T.I.M.E, Functional programming, Defold games development)
- Delivery guides/calendars
- Teacher marking checklist
- Key terminology databases
- AS recap lessons to use in year 13 before embarking on new material
- Student revision checklists
- "Those little extras" pack
- PDF copy of our "Essential algorithms and data structures" book from Amazon
- Cheat sheets
- Text-based adventure game (Telium)

Week	Lessons	File
1	1	FILE
2	2	SLP1-4.111
3	3	SLP1-4.116.9.7
4	4	Programming
5	5	SLP2-4.119
6	6	SLP2-4.111.5
7	7	SLP2-4.12.3
1	8	SLP4-4.2.4.1
2	9	SLP4-4.2.8.1
3	10	Programming
4	11	SLP6-4.4.1.1
5	12	SLP6-4.4.1.5.9.3
6	13	SLP7-4.4.2.1
7	14	Programming
8	15	SLP10-4.1.5.6.6
1	16	Programming
2	17	SLP14-4.5.4.1
3	18	SLP17
4	19	Programming
5	20	SLP18-4.5.1.6.2
6	21	SLP18-4.5.5.6
1	22	SLP19-4.5.9.2.3
2	23	SLP19-4.5.6.7
3	24	SLP19-4.5.1.2.3
4	25	SLP19-4.6.2.1
5	26	SLP19-4.6.4.1
6	27	SLP19-4.7.1.1
1	28	SLP19-4.7.1.4.5
2	29	SLP19-4.7.1.6
3	30	SLP19-4.7.1.10.4
4	31	Year 12 Mock Exam Period
5	32	Year 12 Mock Exam Period
1	Project intro	
2	Analysis	
3	Analysis	
4	SLP19-4.7.4.1	SLP19-4.7.4.2
5	SLP19-4.9.2.6.2	SLP19-4.9.3.1
6	SLP19-4.9.3.2	SLP19-4.9.3.3
7	SLP19-4.9.3.2	SLP19-4.9.3.3

Network and the internet

Understand physical star topology and logical bus network topology
Differentiate between them and explain their operation

2. Using the items shown here, construct a diagram that shows your understanding of a physical star topology.



Internal computer architecture

Minimum expectations and learning outcomes of the basic internal components of a computer system
Each other: processor • main memory • address bus • data bus • control bus • I/O controllers
In particular, understand the concept of a bus and how address, data and control buses are used

Use a line connector shape to join them together.
Value = execute

more than one colour?

- Stores the address of the next instruction to be fetched
- Stores the address of the instruction or data to be fetched
- Stores data read from or being written to the RAM
- Stores the instruction currently being executed

Data type The basic data types provided by programming languages are Atomic Types. These represent data that cannot be subdivided into smaller units. They are the building blocks of all data structures. They are the basic building blocks of all data structures. They are the basic building blocks of all data structures.	Integer A value type used to store integer numbers.	Real/float A value type used to store real numbers. It is a floating-point number. It is a floating-point number. It is a floating-point number.	Boolean A value type used to store logical values. It is a binary value. It is a binary value. It is a binary value.	Character A value type used to store a single character. It is a single character. It is a single character. It is a single character.	String A value type used to store a sequence of characters. It is a sequence of characters. It is a sequence of characters. It is a sequence of characters.
Date/time A value type used to store a date and time. It is a date and time. It is a date and time. It is a date and time.	Pointer/reference A value type used to store the address of another variable. It is the address of another variable. It is the address of another variable. It is the address of another variable.	Record A value type used to store a collection of related data. It is a collection of related data. It is a collection of related data. It is a collection of related data.	Array/list A value type used to store a collection of similar data. It is a collection of similar data. It is a collection of similar data. It is a collection of similar data.	User-defined data type A value type used to store a user-defined data type. It is a user-defined data type. It is a user-defined data type. It is a user-defined data type.	Assignment A value type used to store an assignment. It is an assignment. It is an assignment. It is an assignment.
Subroutine A value type used to store a subroutine. It is a subroutine. It is a subroutine. It is a subroutine.	Sequence A value type used to store a sequence. It is a sequence. It is a sequence. It is a sequence.	Selection A value type used to store a selection. It is a selection. It is a selection. It is a selection.	Iteration A value type used to store an iteration. It is an iteration. It is an iteration. It is an iteration.	Count-controlled loop A value type used to store a count-controlled loop. It is a count-controlled loop. It is a count-controlled loop. It is a count-controlled loop.	Condition-controlled loop A value type used to store a condition-controlled loop. It is a condition-controlled loop. It is a condition-controlled loop. It is a condition-controlled loop.

Minimum expectations and learning outcomes

- Terms 346-349 from A Level Key Terminology should be included and underlined.
- Provide an example of a simple program you have written in a functional programming language.
- Show an understanding of what a higher-order function is and show your understanding of the following higher-order functions: map, filter and reduce or fold.
- Show your understanding of the following list processing operations by providing annotated examples of some simple functional programs: return head of list, return tail of list, return for empty list, return length of list, construct an empty list, prepend an item to a list, append an item to a list.
- Answer the exam questions.

Feedback	Breadth	Depth	Presentation	Understanding
<input type="checkbox"/> All	<input type="checkbox"/> Analyzed	<input type="checkbox"/> Excellent	<input type="checkbox"/> Excellent	<input type="checkbox"/> Excellent
<input type="checkbox"/> Most	<input type="checkbox"/> Explained	<input type="checkbox"/> Good	<input type="checkbox"/> Good	<input type="checkbox"/> Good
<input type="checkbox"/> Some	<input type="checkbox"/> Described	<input type="checkbox"/> Fair	<input type="checkbox"/> Fair	<input type="checkbox"/> Fair
<input type="checkbox"/> Few	<input type="checkbox"/> Identified	<input type="checkbox"/> Poor	<input type="checkbox"/> Poor	<input type="checkbox"/> Poor

Comment and action required

READY TO BUY?

If you like what we have to offer then head over to our online shop to purchase.

All purchases come with a lifetime sitewide licence for a single institution.



shop.craigndave.org/store

Our pedagogy

Read more about our pedagogy here:



craigndave.org/our-pedagogy

We have additional videos which you might find useful which explain the Flipped Classroom method of teaching on our YouTube channel:



[youtube.com/watch?v=ErJIJ5xhW-M&list=PLCiOXwirraUBEEFcJfSQgE2P-
pcor9b9c](https://youtube.com/watch?v=ErJIJ5xhW-M&list=PLCiOXwirraUBEEFcJfSQgE2P-
pcor9b9c)

More reasons to teach with Craig 'n' Dave

Find out more about why we think our resources are the best available for delivering GCSE and A Level Computer Science here:

craigndave.org/why-teach-with-craigndave-resources

If you have issues opening any of the files or experience any other problems, or you just want to ask us a question / provide feedback feel free to email us:



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