# CSP3341: Programming Languages and Paradigms

# Workshop 2

## Workshop Description

This workshop revises and applies topics from Chapter 2 of the textbook. On this page of the document is a collection of text boxes containing either events/concepts in programming language evolution, or the name of a programming language. Drag and drop these to their appropriate locations on the timeline on the other pages. Use your textbook and other research to find years.

Many of the events/concepts were related to a specific language – a space labelled “(**?**)” has been left to fill in the name of the language where appropriate. Some blank boxes are have also been provided – add your own event/concept/language to these and place them on the timeline.

You are not required to submit this workshop and it is not assessable, however you are encouraged to post it to the unit forum on Blackboard/MyECU and participate in discussion of results.

## Events / Concepts

Emergence of functional programming (**?**)

First major implementation of time-sharing via terminals in a programming language (**?**)

First mass-produced computer with floating-point arithmetic support in hardware (IBM 704)

First implementation of hierarchical data structures (records) (**?**)

First implementation of garbage collection (**?**)

First full implementation of an object oriented language (**?**)

Support for run-time exception handling (**?**)

Emergence and popularisation of compiled languages (**?**)

First universal and machine-independent language designed (**?**)

Support for concurrently executing subprograms within a program (**?**)

Concept of depreciation introduced (removal of obsolete/inappropriate features) (**?**)

## Programming Languages

C

ALGOL 60

LISP

Plankalkül (Published)

Java

COBOL

Smalltalk

Fortran I

Plankalkül (Designed)

C#

Ada

PL/I

C++

PHP

Short Code

## Timeline

|  |  |  |
| --- | --- | --- |
| 1945 & Earlier | *In the beginning, there was machine code...* | Machine Code(s) |
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| 2000 & Later |  |  |

## Assignment Note

You may wish to include a timeline similar to this in your assignment, focusing on the major releases of your language and the core features and changes implemented in each one.