

# EBU5305

## Interactive Media Design and Production

### Production Tools: Flash and H5P

### Agenda

- Flah
- H5P
- Labs
- Individual coursework

## Flash ?

- **Adobe Flash** (previously called **Shockwave Flash** and **Macromedia Flash**) is a set of multimedia software created by Macromedia and currently developed and distributed by [Adobe Systems](#).
- Since its introduction in 1996, Flash has become a popular method for [adding animation and interactivity to web pages](#). Flash is commonly used to create animation, advertisements, and various web page components, to integrate video into web pages, and to develop [rich Internet applications](#).

3

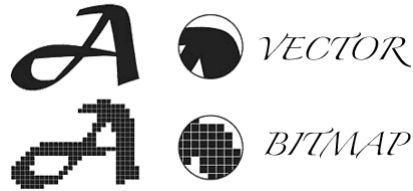
## Flash ?

- Flash can manipulate [vector and raster graphics](#) (i.e. bitmaps) and supports streaming of audio and video. It contains a scripting language called **ActionScript**.
- Several software products, systems, and devices are able to create or display Flash content, including Adobe Flash Player, which is available for [most common web browsers](#), [some mobile phones](#) and other electronic devices.
- Flash versions: CS3 / CS4 / CS5 / **CS6** / **Animate CC**

4

## Why use Flash ?

- Small file sizes
- Fast download speeds
- Precise visual control
- Advanced interactivity
- Capability to combine bitmap and vector graphics
- Include video and **animation**
- Scalability
- Streaming content



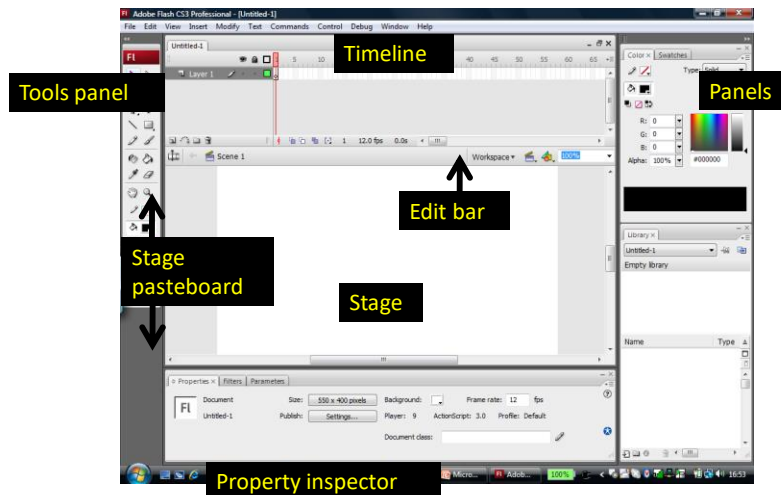
5

## File types associated with Flash

- **Project file** (.fla) : the master project file format, which stores all the settings and resources for your Flash project.
- **Movie file** (.swf) : the movie format, which can be embedded in Web pages.
- **ActionScript file** (.as) : contains source code for a project file or movie (ActionScript can also reside directly within a SWF file, but on occasion it will be exported separately).
- **Video file** (.flv) : Flash video file format, which is usually embedded in a SWF file.
- Windows **Projector file** (.exe) and MacProjector file (.app) : stand-alone projector file that can play on any computer without the need for the Flash Player.

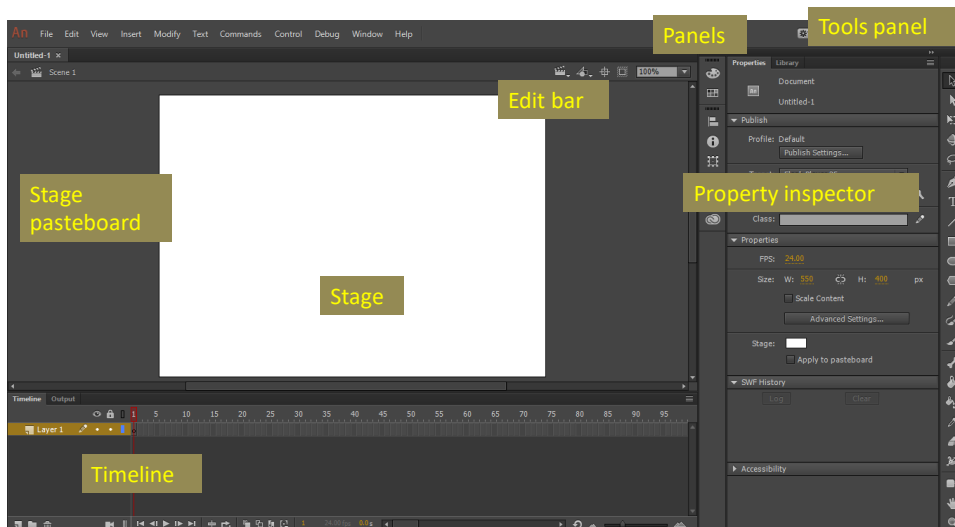
6

## Interface overview (CS3, ..., CS6)



7

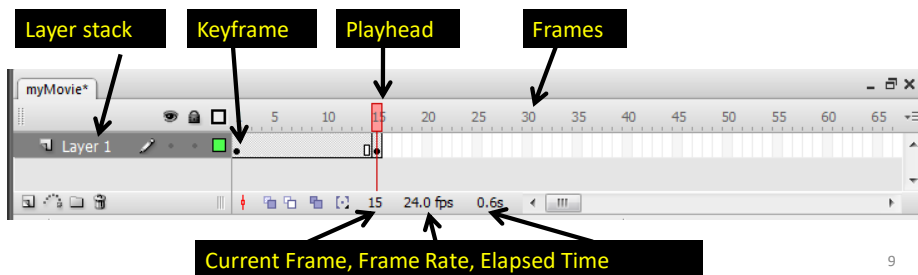
## Interface overview (Animate CC)



8

# Timeline

- Frames:
  - Just like film, Flash divides lengths of time into frames.
  - Frames carry the content of the previous keyframe.
- Keyframes:
  - Define a moment on the Timeline when content is inserted or actions occur.



9

Be aware ...

EBU5305 is **not** a course on Flash !

You will **use** Flash to produce animations but  
you will have to learn it by practicing it during  
labs and on your own.

10

# Learning and Practicing Flash

- Use the CS6\_Flash\_tutorials documents as reference (available on Qmplus)
  - Online Help: F1
  - See various Flash notes in FlashLab folder on QMplus
  - See FlashLab sheet for Flash practice exercises
- 
- You will learn Flash by using it!

11

## FlashLab

FlashLab's objective is to familiarise yourself with the Flash interface and produce timeline based animations (tweening) as well as some ActionScript based interaction.

At the end of the lab, you will have produced these applications:






[animSymbols.swf](#)





[shoppingCart.swf](#)







[videoPlayer.swf](#)












12

# FlashLab

 ActionScript  
 SoundVideo  
 Timeline  
 CS6\_Flash\_Tutorials\_Daniel\_K.\_Schneider  
 FlashLab

 animSymbol\_Final  
 car  
 mountainBckg  
 planes

 AudioFlash  
 catchingAir  
 finalVideo  
 Free  
 Organ  
 VideoFlash

 actions  
 bee  
 Components  
 EventHandlering  
 events  
 Introduction-to-action  
 Introduction-to-events  
 Introduction-to-keyboard  
 keyboard  
 shoppingCart  
 shoppingCart

13

## Examples of Flash applications



## The Future of Flash?

- In early November 2011, Adobe announced that it would discontinue development of Flash for mobile devices and reorient its efforts in developing tools using HTML5.
- On July 25, 2017, Adobe announced that both the distribution and support of Flash will cease by the end of 2020.

15



## HTML5

- **HTML5** is a markup language used for structuring and presenting content on the World Wide Web. It is the fifth and current major version of the HTML standard.
- It was published in October 2014 by the World Wide Web Consortium (W3C) to improve the language with support for the latest multimedia, while keeping it both easily readable by humans and consistently understood by computers and devices such as web browsers, parsers, etc.

16



## HTML5 versus Flash

- While some features of HTML5 are often compared to Flash, the two technologies are very different.
- Both include features for playing audio and video within web pages, and for using Scalable Vector Graphics.
- However, HTML5 on its own cannot be used for animation or interactivity – it must be supplemented with CSS3 or JavaScript.
- There are many Flash capabilities that have no direct counterpart in HTML5

17

## HTML5 versus Flash

- Constructing Flash websites using Adobe tools is relatively easier than with integrated development environments for CSS, HTML, and JavaScript.
- However, many of Adobe's tools are expensive and proprietary software.
- Tools for HTML5 are just starting to come to market (e.g. H5P)

18

# Agenda

- Flah
- H5P
- Labs
- Individual coursework

19

## H5P ?

- H5P is an authoring tool and a plugin for existing publishing systems that enables the creation of interactive [HTML5](#) content like Interactive Videos, Presentations, Games, etc.
- Currently it supports Wordpress, [Moodle](#) and Drupal.
- It is open source and free to use.
- And you can author H5P content directly on the H5P site.

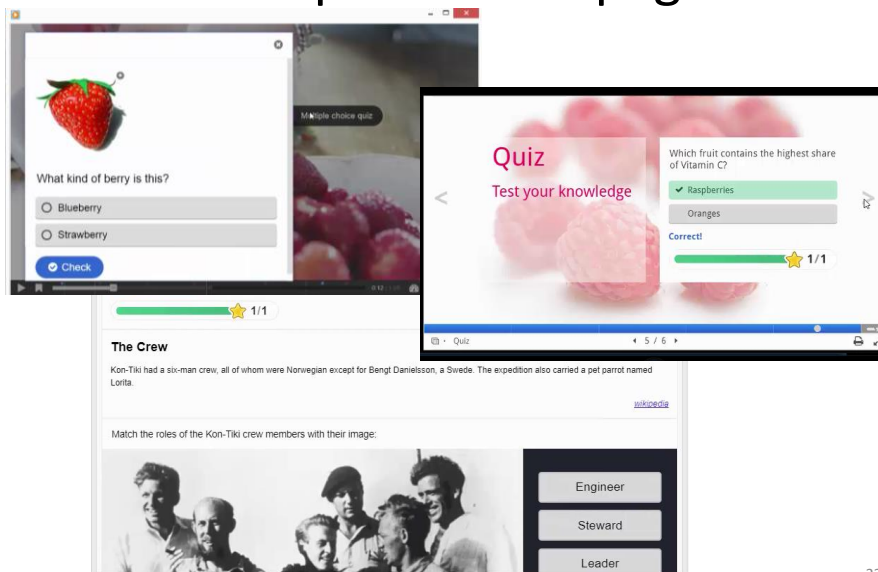
20

## H5P Resources

- [H5PLab](#) document (QMplus)
- <https://h5p.org/documentation/for-authors/tutorials>

21

## Examples of H5P pages



22

# Agenda

- Flah
- H5P
- Labs
- Individual coursework

23

## Labs

- 3 labs on Flash -> individual coursework
- 1 lab on H5P

24

## FlashLab and Individual Coursework

- **Lab 1: Drawing and timeline-based animation (tweening)**
- **Lab 2: Practicing ActionScript 3.0**
- **Lab 3: Adding sound and video to Flash applications**

→ **Individual coursework submission**

25

## H5PLab

- **Lab 4: Getting started with H5P**

Followed by:

- **Labs 5 to 8: Group coursework.** It will consist in creating an animation in Flash, import it as a video in H5P, make it interactive so it becomes an **interactive media learning object** with **content** items, **practice** items, and **assessment** items

26