

# FUNDAMENTAL OF MULTIMEDIA

## MULTIMEDIA SCRIPTING

By  
**Dr. Rahmah Mokhtar**  
Faculty of Computer Systems & Software  
Engineering  
[drrahmah@ump.edu.my](mailto:drrahmah@ump.edu.my)



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

# Chapter Description



- Expected Outcomes

At the end of this lesson you will understand:

- What is multimedia scripting
- Syntax of action script
- Be able to form the action script programming

- References

- Tay Vaughan. Multimedia: Making It Work, Ninth Edition. Mc Graw Hill. 2014. ISBN-13: 978-0071832885.
- Zhe-Nian Li, Mark S. Drew.S & Jiangchuan Liu. Fundamentals of Multimedia (Texts in Computer Science) 2nd ed. 2014 Edition. Springer Publication. 2014. ISBN-13: 978-3319052892.
- Khalid Sayood. Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) 4th Edition. Elsevier. 2012 ISBN-13: 978-0124157965.
- Savage, T.M., Vogel, K.E. An Introduction to Digital Multimedia 2nd ed.. 2013. Jones & Bartlett Learning ASIN: B00LZM6ESY.
- Parag Havaldar, Gerard Medioni. Multimedia Systems: Algorithms, Standards, and Industry Practices (Advanced Topics) 1st Edition. Cengage Learning. 2011. ISBN-13: 978-1418835941



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#).

# INTRODUCTION TO SCRIPTING LANGUAGE : ACTION SCRIPT

- \* Object-oriented programming language
- \* Used to power Flash Player
- \* Similar to JavaScript
- \* Can be embedded in a Flash project (.fla) file
- \* Written as a stand-alone ActionScript (.as) file, or created in Flex Builder (new tool built on Adobe's Flex framework - creating RIAs (Rich Internet Applications))



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

\*ActionScript help a Flash designer to leap the hurdle and create fully interactive applications , dynamic Web applications and interactive video games



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

- \*History of ActionScript
- \*ActionScript 1.0
- \*ActionScript 2.0
- \*ActionScript 3.0



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

# Action Script 1.0/2.0 vs 3.0

## ActionScript 1.0/2.0

Class      method      Instance Name      Properties  
↓           ↓           ↓           ↓  
myMovieClip.createTextField("thickness\_text", 10, 0, 0, Stage .width, 22);

## ActionScript 3.0

Instance Name      Class      Method  
↓           ↓           ↓  
var myText:TextField = new TextField();



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

# Action Script 3.0 new feature

<b>Feature</b>	<b>Description</b>
Package	AS 3.0 classes are organized into packages, folders that hold similar AS class files.
Document class	Introduced by Flash CS3. Allowed to create own custom class for the main Timeline
AS tools	Help to learn how to write and organize code more effective
Scripting improvements	Provide new AS debugger that offers improved flexibility and feedback and is consistent with Flex 2 debugger. Can convert animations directly to AS Copy and paste AS animation propertise from one object to another
Language consistency	More consistent in syntax



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

# Benefits of Action Script 3.0

\*

- \* fast downloading speed
- \* precise visual control
- \* advanced interactivity
- \* capable to combine bitmap and vector graphics
- \* include video and animation
- \* scalable and streaming content



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).



# \*ActionScript 3.0 elements\*

- Variables
- Instances and instance Name
- Properties
- Function and Methods
- Event, event handlers, and event listeners
- Classes
- Conditional Statements



OER Fundamental of Multimedia by Dr. Rahmah Mokhtar work is under licensed [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).