



Internet Computing

# **Advanced Multimedia Development (AMMD)**



**2004**



# Introduction

- Welcome
- Expectations
- Compulsory Textbook
- Subject Websites
- Defining the Subject
- Lesson Structure
- Projects & Assessment
- Intro to Flash MX2004, ActionScript
- Intro to Game Programming



# Expectations

- Attitude, maturity & responsibility
- Learn fast
- Being resourceful & read the textbook
- Take notes
- Two way Learning



# Compulsory Textbook



## **Macromedia Flash MX 2004 Game Programming**

Craig S. Murray, Justin Everett-Church (2004)  
Boston, Massachusetts. Premier Press



# Compulsory Textbook



## **Macromedia Flash MX 2004 – Design Professional**

Jim Shuman, Piyush Patel (2004)  
Boston, Massachusetts. Thomson Course Technology



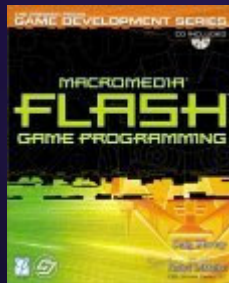
# What You need to invest ...



+



= \$59.50 (recommended)



= \$32.90 (must buy), week 4 to 15



= \$34.50 (good to have), week 1 to 5



# What You need to invest ...

ZIP Disk for IT3-5-53

Ear Phone (for all labs)

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# Subject Websites

There are 2 types of subject websites you can access to get your weekly materials.

- ✓ **Intranet (main website, latest info)**  
(Accessible **ONLY** from school)

<http://it-idmstud/subjects/AMMD2004>

- ✓ **Internet**  
(Accessible from both home & school)

<http://ole-bb.tp.edu.sg>





# Teaching Methodology

- Having fun, helps self-motivation
- Project and workshop driven
- Asking questions
- Learning new things by trying new things
- Taking risk and experimentation
- Learn to think!!



# AMMD is **not** about ...

- Software
- Finger pushers
- Experts in Flash MX2004
- Animation

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## It is about ...

- Multimedia (Macromedia Tools)
- Interactivity (Flash MX2004)
- Programming – (ActionScript 2.0)
- Problem Solving (Common Sense)



# Lesson Structure

- **Lecture – 1 hr per week**
- **Tutorial – 1 hr per week**
- **Practical – 3 hrs per week**



# Projects & Assessment

- Project 1 – Trailer Park Movie, Week 5 (20%)
- Term Test (20%)
- Project 2 Prototype, Week 11 (20%)
- Project 2 Final Submission, Week 14 (40%)

Random Lecture Short Tests (maximum 3% each), marks will be distributed to projects.

Show projects (past students).



# Submission of Projects

- **Submission** => during lab sessions
- **Venue:**  
Normally in the lab



# Penalty for **Late** Submission

- **Late and < 1 day** : 15% deduction
- **Late > = 1 and < 2days** : 30% deduction
- **Late > = 2 days** : Subject Team to decide on further penalty deduction amount.

(“Day” mentioned here **INCLUDES** non-working days)



# Classroom Management

- Attendance is compulsory for **All** Tutorials & Lab Sessions.
- **15 minutes late** is recorded as 1 absence
- **2 Absences (lab or tut)** - 1st warning letter
- **5 Absences (total)** - **Debar**





# Intro to Flash MX2004

- Macromedia Flash MX2004
- Program allows to create interactive experiences, primarily by using animations
- Mainly for web
- Has excellent drawing tools
- Has tools for interactive controls



# Intro to Flash MX2004

- Use mainly vector images (small file size)
- Vector images are scalable (can be resized and reshaped without distortion.)
- Flash provides for streaming content
- Playing while downloading



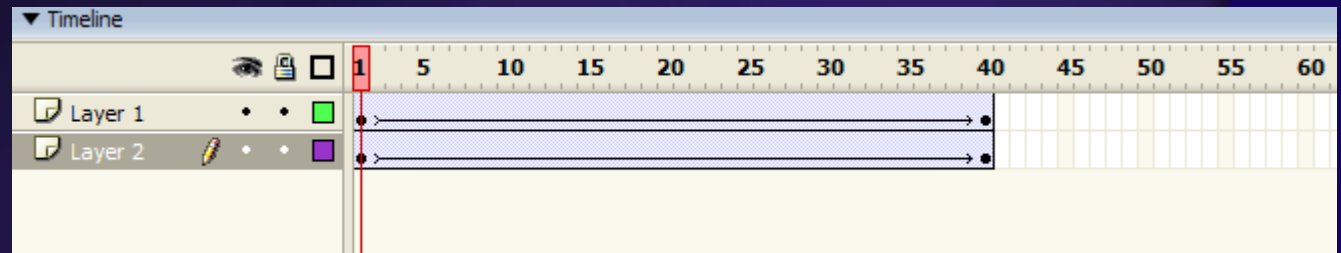
# Intro to Flash MX2004

- Stage
- Timeline
- Panels – Library

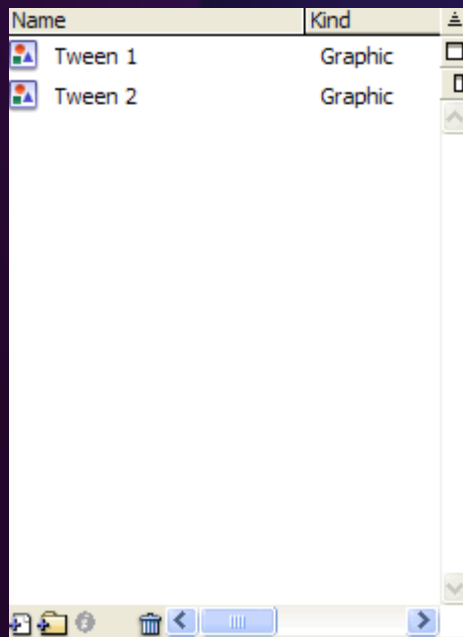
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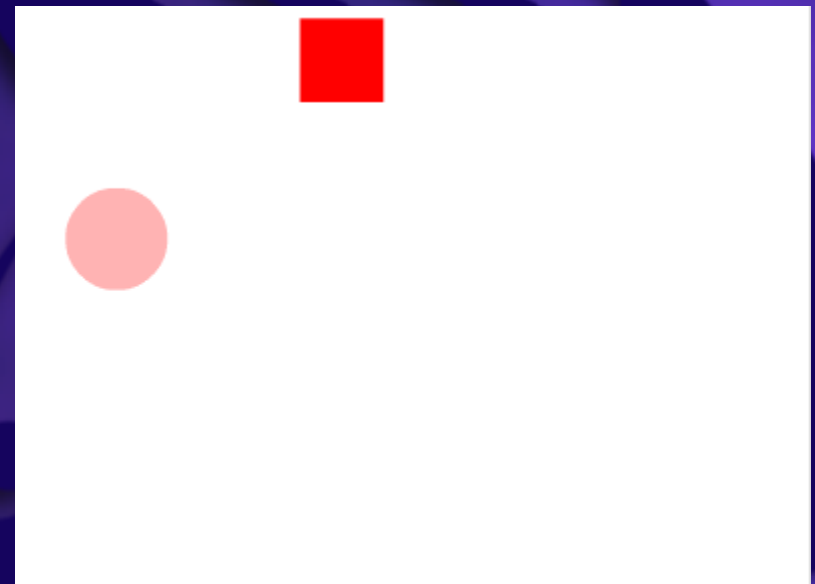
# Intro to Flash MX2004



Timeline



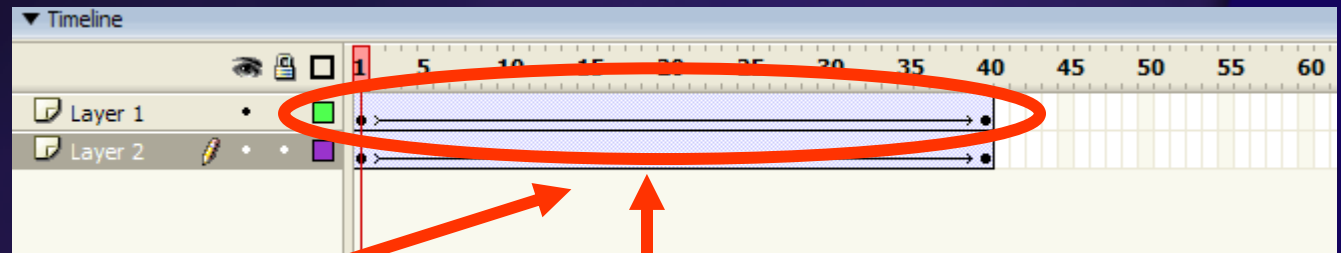
Panels – Library



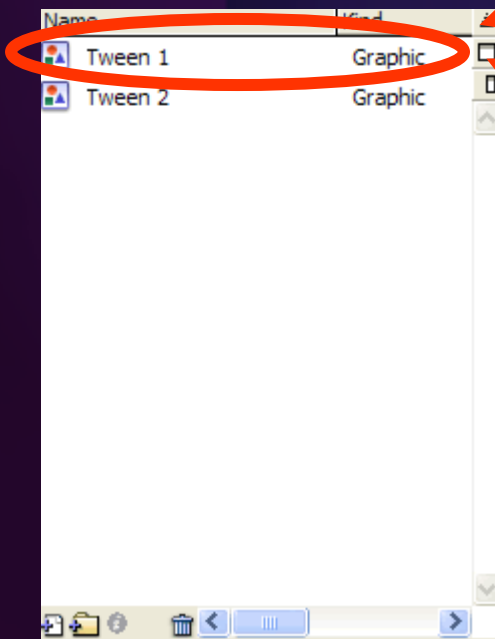
Stage



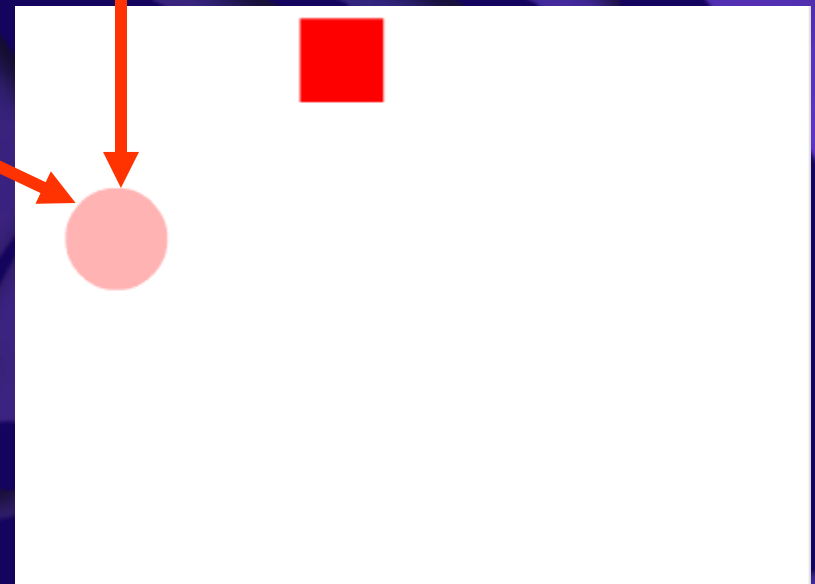
# Intro to Flash MX2004



Timeline

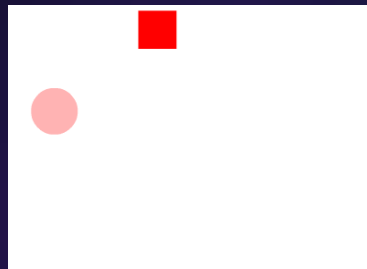
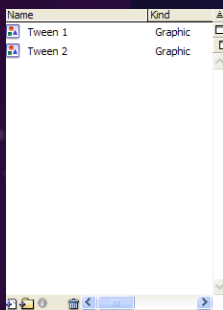
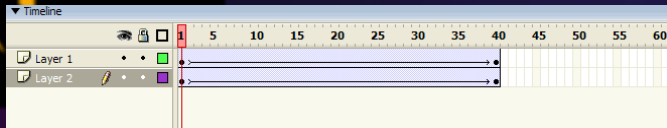


Panels – Library



Stage

# 2 Ways to Develop Flash Movie



```
1 trace ("==Equivalence==");
2 trace (10 == 4);
3 trace (0 == 0);
4 trace ("Hello" == "Goodbye");
5
6
```

Layer 1:1  
Line 6 of 6, Col 1

Visual Tools

Authoring Tools

Usually a  
combination  
of both

ActionScript  
Programming



# Intro to ActionScript 2.0

Our goal of creating video games require more power than authoring tools provides

ActionScript has 2 versions

- ActionScript 1.0
- ActionScript 2.0

ActionScript 2.0 adds case sensitivity

More compile-time checks with classes



# Intro to ActionScript 2.0

ActionScript is based on ECMAScript Standard (ECMA-262)

ECMAScript standard is based on C++ syntax.

JavaScript is also based on ECMA-262.

You will find transition easy.





# Game Programming

- Game Programming with ActionScript 2.0
- Just a introduction

Game programming is not about just “programming”.

Surprise! It is more than programming.



# Creating a Game

1. Dream up a game idea
2. Write a design document
3. Obtain art
4. Implement
5. Test and debug
6. E-mail your friends a URL

This subject is a introduction.

Spends more time on items 3, 4



# Conclusion

AMMD is a “tough” subject,  
BUT it can be really fun!

**So ... Lets Have Fun !**