



# **Proses dan Model Rekabentuk Pembangunan Aplikasi**



# Steps in Authoring Processes

- There are three steps required in authoring processes
  - Pre-Authoring
  - Authoring
  - Post-Authoring



## Discussion Time..

- Discuss in group of 5, these steps in multimedia development.
- Give one example of each step.
- Share the outcomes of discussion to the class.

# Steps in Authoring Processes

## **PRE-AUTHORING**

- First step in multimedia authoring programs.
- It is about collecting, converting and adjusting the desired media (graphics, animation, audio and video) for your application.
- You will decide which types of media will be used in the application. Hence, the process of creating and converting the media will be carried out afterward.
- You will also conduct a necessary adjustment to the selected media.

# Steps in Authoring Processes

## **AUTHORING**

- The integration of all collected media in the application.
- The use of selected media in the application should be equalize in order to achieve the target concept or approach.
- In this level, the application interactivity will be added.
- To complete the processes of authoring, the packaging is required so that the application can be run standalone (.exe).



# Steps in Authoring Processes

## **AUTHORING**

- The packaged application is easier to disseminate and highly secured from being hacked or illegal copied.
- The packaged application cannot be edited or modify by other user.

# Steps in Authoring Processes

## **POST AUTHORIZING**

- The process of dissemination of the application to the target users.
- The method of dissemination can either in the form of CD-ROM or Network/Internet.
- CD-ROM will require a stand-alone packaging while Internet, you need to publish the application in web form.
- It requires additional software, shockwave in order to be viewed over the Internet.



# Conclusion

## 1- Pre-Authoring

- Collect, convert
- and modify
- Media

## 2- Authoring

- interactivity
- & packaging

## 3- Post-Authoring

- Distribution/  
– dissemination



# PEMBANGUNAN PERISIAN

## Jenis-Jenis PBK

- Tutorial
- Latih Tubi
- Simulasi
- Permainan

# PEMBANGUNAN PERISIAN

## Perisian Pembelajaran Berbantuan Komputer (PBK)

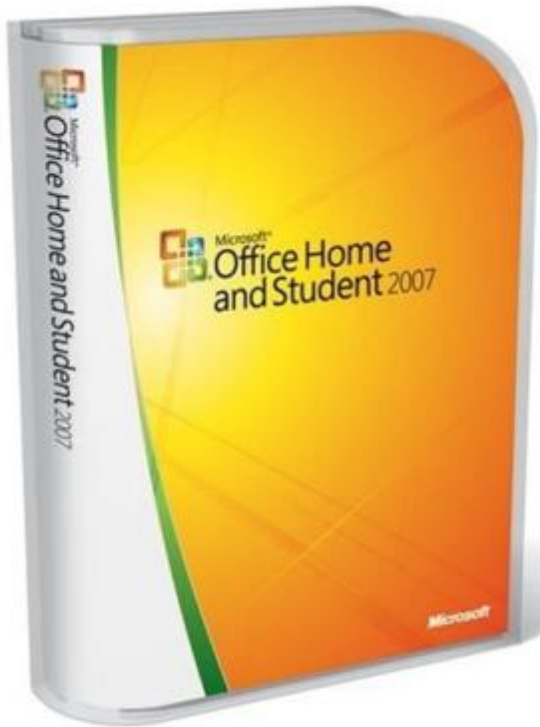
Perisian jenis ini bersifat "mengajar" penggunaannya mengenai sesuatu perkara. Lazimnya, perisian pendidikan berbentuk tutorial, latihan tubi, simulasi, dialog dan perisian model.



# PEMBANGUNAN PERISIAN

## Perisian tutorial

- Memberikan arahan langkah demi langkah untuk mengajar sesuatu konsep yang baru



# PEMBANGUNAN PERISIAN

## Perisian latihan tubi

- Bertujuan untuk mengukuhkan konsep yang telah dipelajari dan membe peluang untuk pelajar melatih diri mengaplikasikan konsep yang tel dipelajari.



# PEMBANGUNAN PERISIAN

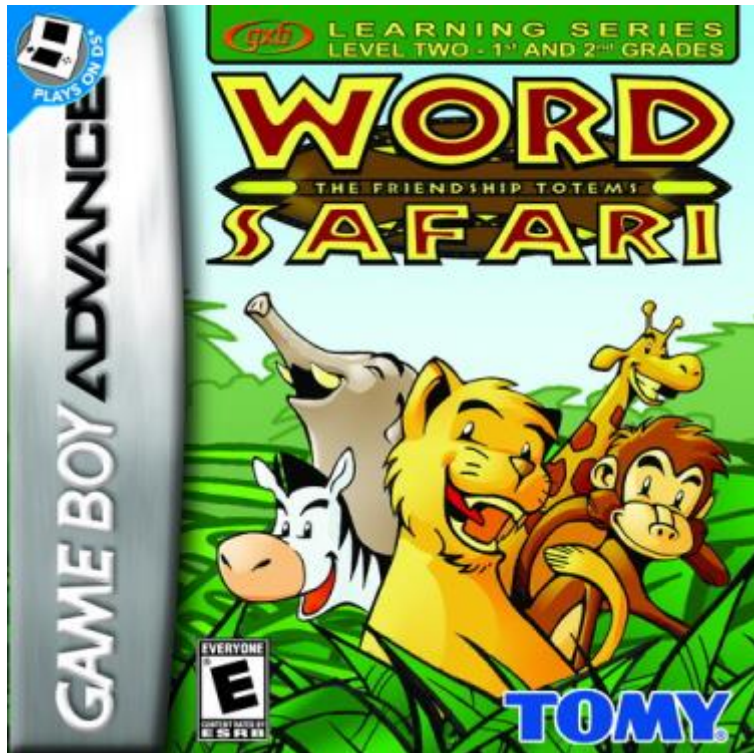
## Perisian simulasi



- Membenarkan pelajar mengaplikasikan kemahiran atau konsep yang telah dipelajari dalam situasi sebenar



# PEMBANGUNAN PERISIAN



## Perisian Permainan

- Membenarkan pelajar mengaplikasikan kemahiran atau konsep yang telah dipelajari dalam situasi sebenar

# PEMBANGUNAN PERISIAN

- Strategi pengajaran dalam PBK
  - Latih tubi
  - Tutorial
  - Permainan
  - Simulasi
  - Penemuan
  - Penyelesaian Masalah

# PEMBANGUNAN PERISIAN

## Latih tubi

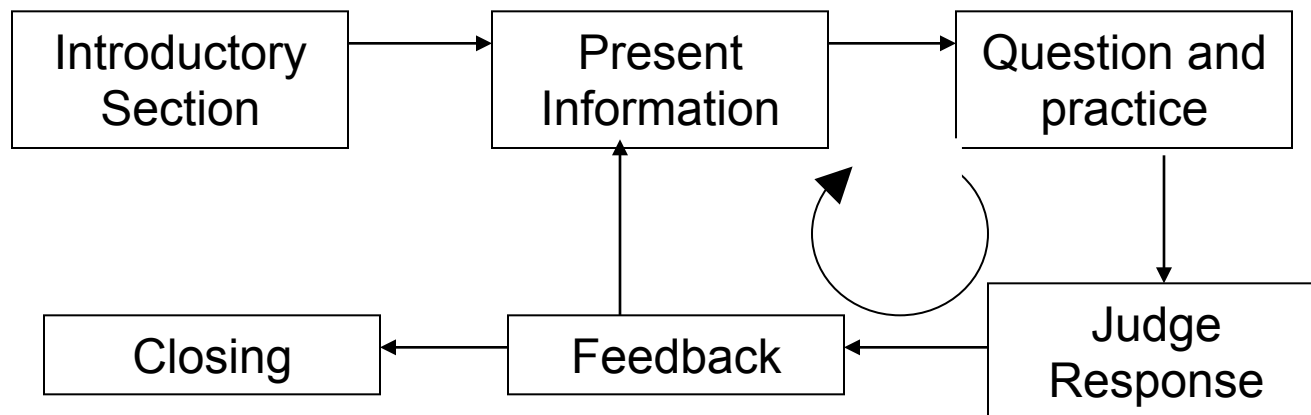
- Untuk menilai semula kandungan yang telah diajar
- Mengimbas pengetahuan tentang fakta asas atau terminologi
- Memberikan soalan bertubi-tubi dalam bentuk pelbagai



# PEMBANGUNAN PERISIAN

## Tutorial

- Mempersiapkan maklumat atau pelajaran baru
- Mengajar pelajar konsep atau prinsip untuk sesuatu perkara



# PEMBANGUNAN PERISIAN

## Simulasi

- Simulations gives the students the chance to experience a domain, not just study it
- Experiences are based on interactions, not explanations
- Simulation can offer varying degree of realism, depending on student's background and interest

# PEMBANGUNAN PERISIAN

## Simulasi

- Two groups of simulations
  - *About something* simulations
    - Physical object or phenomenon that represented on the screen
  - *How to do something* simulations
    - Teach a sequence of actions to accomplish goal

# PEMBANGUNAN PERISIAN

## Permainan

- Meaningful, relevant context
- Active participation in an interactive story
- Helps students to organize information, followed by putting knowledge to use
- Intrinsic motivation
- Challenge and curiosity are triggered

# PEMBANGUNAN PERISIAN

## Permainan

- A feeling of control, but with an edge of uncertainty
- Part art (creative) and part science (analytic)
- Weaving the educational content and game together into meaningful whole
- Importance of making the student a “co-designer”

# PEMBANGUNAN PERISIAN

## Penemuan

- Menggunakan pendekatan induktif-dilaksanakan oleh pelajar secara cuba jaya

## Penyelesaian masalah

- Strategi ini dilaksanakan dengan pernyataan masalah, diikuti dengan pernyataan hipotesis, pemeriksaan data dan seterusnya pembentukan jalan penyelesaian

# PEMBANGUNAN PERISIAN

- Pada akhir pembelajaran, pelajar dapat:
  - Mengenalpasti model reka bentuk perisian multimedia yang boleh digunakan.
  - Menyatakan perbezaan dan persamaan antara model reka bentuk perisian multimedia yang dibincangkan.