Improving Time Management for students through the use of an educational game
Why?

- Why time management?
  - The poor time management skills of Hong Kong students have raised many problems in meeting deadlines

- Why a game?
  - It helps students to learn a skill as they play, this way of learning is attractive and interesting
Objective: for Teachers

- The teaching materials can be distributed easily
  - through CDs or Internet
- Students can learn during the time outside class
- Performance can be reviewed easily
- A type of management practice which is hard to imitate in classroom can be achieved
Objectives: for Students

- The multimedia techniques are interesting to encourage students’ learning
- They can practice more their time management in environment
- Their performance are shown and stored in the game which can be retrieved easily
- They can adjust their learning pace
Agenda

Analysis of necessary features

Design of the game

Implement demo version

Testing, debugging, & evaluation

Final version and evaluation

Current status
Analysis of Features

The game should:

- Have content which should be measurable
- Be configurable for different machines
- Have user-friendly functions for basic operations
- Give tasks which are easy to understand
Overview - Design of the Game

1. Game Engine & Software
2. Story Design
3. Progress Logs for Players
4. Teaching Material in the Game
5. Examination and Application
1. Game Engine & Software

- **Engine** - *RealityFactory*
  - import models and scenes
- Character modeling software – *Milkshape*
- Texture generation – *GIMP, LithUnwrap*
- Terrain generation – *GMax*

- Most of them are open source software – *Free!*
2. Story Design

- **Story criteria:**
  - It is related to daily student life
  - It needs to be interesting and understandable to most players

- Therefore, a typical undergraduate student becomes the main character
3. Progress Logs for Players

- **Progress Indicators**
  - Reviewing previous performance
  - Display four main attributes
    - health, concentration, relationship, and knowledge.

- **Difficulty Levels**
  - A new level contains more challenging tasks
4. Teaching Material in the Game

- A game is very different from typical teaching materials. E.g. notes, speech, and PowerPoint presentations.

- The game converts those information into accepted game format. For example:
  - Rules and theories ➔ conversations
  - Knowledge acquired from characters
  - Speech ➔ television programs in the game
5. Examination and Application

- Examination
  - Provides questions before the difficulty level changes
  - Contains content acquired from the game or basic knowledge about time management
- Application of time management
  - Time is limited for each task
  - Players need to achieve certain goals within a time range
  - This situation imitates real life problems with deadlines

1: We will be late without this concept.
2: A good schedule depend on good time management.
3: We need it to fulfil this course’s requirements.
4: People ignore this concept and arise many problems.

Why time management is important for students?
Demonstration

- Let’s see the game demo
Current Status

- Designed and tested the essential functions and software
- Implemented some scenes for the demonstration
- Drawn the basic GUI
- Imported a few characters for the game
- Programmed simple interactions among characters and the player
Future Development

- More characters and scenes
- More contents and teaching materials
- More interactive activities among the player and models in the game are necessary
- More difficulty levels
- A user manual
Finally

- Q&A
The End

- Thanks!