Fall 2010

Game Production Design

456340-1
Fall 2010
09/06/2010
Kyoung Shin Park
Multimedia Engineering
Dankook University

Course Information

- Course
  - Game Production Design (456340-1)
  - Fall 2010, 3 credits, 3 hours
  - Course hour & room: Monday 1,2,3 (2nd Science Hall #313-1)
- Instructor
  - Kyoung Shin Park
  - kpark@dankook.ac.kr
  - 010-8636-1960 (mobile)
  - The Third Science Hall, Room 417
  - Office hour: Tuesday 1:00-2:00
- Prerequisites
  - Game programming

Purpose

- This course will provide an introduction to fundamental and advanced game design and programming techniques.
- In this course, students will form project groups to design and develop a simple computer games.
- Topics include video game history, software architecture for games, gameplay design, game graphics, interface, networking issues, etc.

Text Book

- Text Book
  - Core Techniques and Algorithms
  - Daniel Sanchez-Crespo Dalmau
  - 34,000 Won
- Reference Book
  - Game Architecture & Design: A NEW EDITION
    - Andrew Rollings, Dave Morris,
    - 29,000 Won
  - The Art of Game Design
    - Jesse Schell
    - 30,000 Won

Evaluation

- Attendance : 20%
- Final Exam: 20 %
  - There will be a final take-home exam that covers all the subjects discussed in the classroom.
- Individual Assignment: 30%
  - Individual class assignment
  - Paper reading & summary report
  - Presentation
- Term Project: 30%
  - Survey & brainstorming & storyboarding
  - Midterm progress report & presentation
  - Final report & presentation
- Class Participation & Attitude: extra 10 %

Topics

- Overview
- Gameplay
- Game Graphics
- Game Software Architecture Design
- Game Human-Computer Interaction
- Game Sound Design
- Game AI
- Game Physics
- Networked Game

Schedule

- 09/06 : Course Overview & Survey
  History of video games (chap 1)
- 09/13 : Ludology & Understanding Fun
  Introduction to term project (MobileAR Game)
  Reading summary report
- 09/20 : Designing the Game
  & Gameplay Brainstorming
  Mobile AR game survey & presentation
- 09/27 : Software Architecture of Game (chap 2 & 6)
  HW1(Term project Mobile AR game modification)
- 10/04 : Human-Computer Interaction (chap 5)
  HW2(Term project game brainstorming)

Schedule

- 10/11 : Introduction to CG (chap 11 & 12)
  HW3 (Term project game storyboarding)
- 10/18 : iPhone & Objective-C 소개
  Midterm Presentation
- 10/25 : Sound Design (chap 5)
  HW4 (Term project game tech support)
- 11/01 : Introduction to stereoscopic computer graphics
- 11/08 : Game AI (chap 6, 7, 8)
  HW5 (Term project game UI design)
- 11/15 : Game Physics (chap 19)
- 11/22 : Networked Game Development (chap 10)
- 11/29 : Special Visual Effects (chap 17, 18)

Schedule

- 12/06 : Character Animations (chap 15)
- 12/13 : HW6 (Term project final design document)
- 12/20 : Final Presentation

Individual Assignment

- Reading summary report
  - 1-page report
- Mobile AR survey
  - 5~10 min presentation & discussion
  - 3~5 page (single-space, 10-point font) report
- Mobile AR game presentation
  - 15~20 min presentation & discussion
  - 5~10-page (single-space, 10-point font) report

Term Project

- Topic: 'Mobile AR Game' Development
- Students are encouraged to work on a project related to your own area of interest
  - Game idea brainstorming
  - Game survey
  - Term project critique & group members evaluation
  - Extra Credit 10% - paper reading & presentation
- Projects can be done as groups of two or three.
- Also, the project report should indicate to which portions of the project each member contributed.
- You group project blog will also help monitor your steady progress across the semester.
- Also, the final project report should indicate to which portions of the project each member contributed.

Term Project

- Mobile AR game modification
- Game brainstorming & storyboarding
- Game technology support & UI design
  - 10~15 min presentation & discussion
  - 5~10-page (single-space, 10-point font) report
- Final design document (12/14)
  - 20 min presentation & demonstration
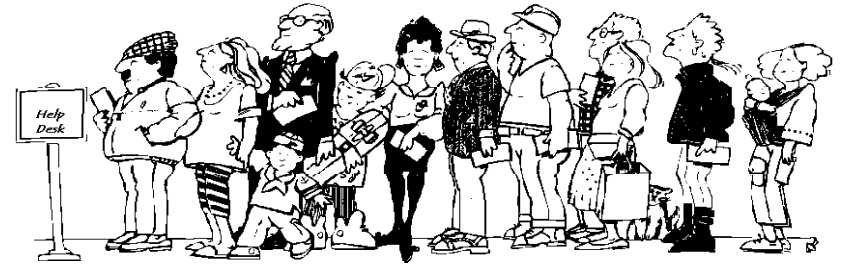 - 10-page (single-space, 10-point font) report

Term Project Groups

- 1 group-
- 2 group-
- 3 group-
- 4 group-

Announcement

- Class blog:
  http://dis.dankook.ac.kr/lectures/gd10/
- Reading summary (1-page) due by Sep 13th
  http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=523
  2247&tag=1