GAM100: Project Introduction
Class 01: Introduction

Summary

Lecture Topic:

- Introduction and Housekeeping
- The Path through DigiPen

Lab Topic:

- Briefing on Text-Based Games
- Examples of Text-Based Games

Homework Due: None Today

Homework Assigned: None Today

Instructors

Yannick Gerber

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- Office Hours: By appointment

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Raymond Teo

Housekeeping Stuff

- Class Structure
  - Short lectures, followed by lab session

- The syllabus has been posted in Moodle.

- We will be using Moodle for grading and record keeping purposes.
  - Submit stuff on time: I won't chase you, I'll just deduct marks.

Moodle is Your Friend

- Do you have access to Moodle?
  - https://distance.sg.digipen.edu/

- Syllabus has been posted there.
- Slides will be updated there.
- Used for grading.

- The <u>News forum</u> is our main form of communication with you.
  - If you have a question about the class, please post a question in the forum. I will answer for the whole class.

Moodle is Your Friend

- Do you have access to Moodle?
  - https://distance.sg.digipen.edu/

- Join the GameCentralSG forum in Moodle.
  - This is used for general announcements.

- In addition, don't overlook the value of self-organizing.
  - Your seniors have set up their own Discord groups to look for teams, etc. away from the prying eyes of the instructors.
  - Talk to the TA's. They can really help you settle in.

Overall Objectives

- **Main**
  - **Development**: Introduce basic knowledge of game architecture, the elements of game code, and game flow, as well as source control and code organization.
  - **Production**: Introduce the game production process, including pitches, concepts, design documents, scheduling, milestones, testing, and team roles.

- **Secondary**
  - **Analysis**: Analyze games and understand genres, and platforms.
  - **Marketing**: Introduce basic game marketing, target audiences, age/gender issues (including ratings systems), and ethics for game development.

Course Content

- Weeks 1-3
  - Basic Knowledge: Game Dev Roles, Overview of Game Dev, etc.
  - Soft Skills: Brainstorming, Teamwork, Presentations, Pitching, etc.

- Weeks 4-6
  - Technical Skills: Game Engine Architecture, Game States, Inputs & Updates, etc.

- Weeks 8-14
  - Work on Project.

Tentative Schedule

Week	Lecture
1	Course Introduction | The Path Through DigiPen | Previous Years Game Project Study
2	Game Production 101 | The Lecturers and their Background.
3	How to Game Design | Visual Studio 101 | Source Control 101
4	Game Engine Architecture | Debugging with Visual Studio | Finite State Machines Project: Nim Game | Project: Snake Game
5	Rendering Loop | Double Buffering | 1D Arrays | Collision Grid & Spatial Partitioning. Project: Snake game
6	Presentation Skills Project: Original Game Kickoff.
7	Study Break
8	**Pitch Presentations**
9	*Work on Project*
10	**Prototype Presentations**
11	Conducting Playtests
12	Advanced Debugging with Visual Studio. Playtest
13	*Work on Project*
14	**Final Presentations for Projects** | Project Submission
15	No Class

Key Deliverables

- Previous Years Game Playthrough and Report.
- Nim Project.
- Snake Project.
- One Final Project with milestones and play testing.
  - Text-Based Game.

- This is a Pass / Fail class.
  - It does not affect your GPA in either case.
  - **BUT** if you fail, it will **ONLY** be offered again next Fall.

Assignments and Grading

Assignment	Weight
Previous GAM100 Games Play Report	**5**
GAM100 Snake	**20**
Original GAM100 Game pitch	**5**
Original GAM100 Game Presentation	**10**
Original GAM100 Game Prototype	**5**
Original GAM100 Playtest Report	**5**
Original GAM100 Game Project	**50**
Total	**100**

Grading Policy

Grade	Coding Assignments	All Other Work
F	Unacceptable work.	Unacceptable work.
D	Barely works or is missing a major feature.	Substandard work, although it shows some understanding of the basic principles.
C	Works but has one or more defects and/or minor missing features.	Average student work.
B	Works well but may have a minor defect or minor missing feature.	The work meets a professional standard on most levels.
A	Works according to requirements, no defects or missing features.	The work is outstanding and exceeds professional standards on all levels.

- DigiPen Letter Grade algorithm:
  - A: 93-100%; A-: 90-92.99%; B+: 87-89.99%; B: 83-86.99%; B-: 80-82.99%; C+: 77-79.99%; C: 73-76.99%; C-: 70-72.99%; D: 60-69.99; F: <60%

Copyright Agreement

- DigiPen takes cases of plagiarism very seriously.
  - ALL content in your game projects have to be created from scratch.
  - You CANNOT use any material that you did not create, whether it is art, music, scripts, code, etc.
  - You cannot use your friends, family members, public domain material, or other students not in your class (unless you talk to your instructor first).
  - You can never use outside artists / musicians at all.
- Violations of this rule can lead to expulsion!

- Please sign the **Copyright Agreement Form** to signify your understanding of this rule.
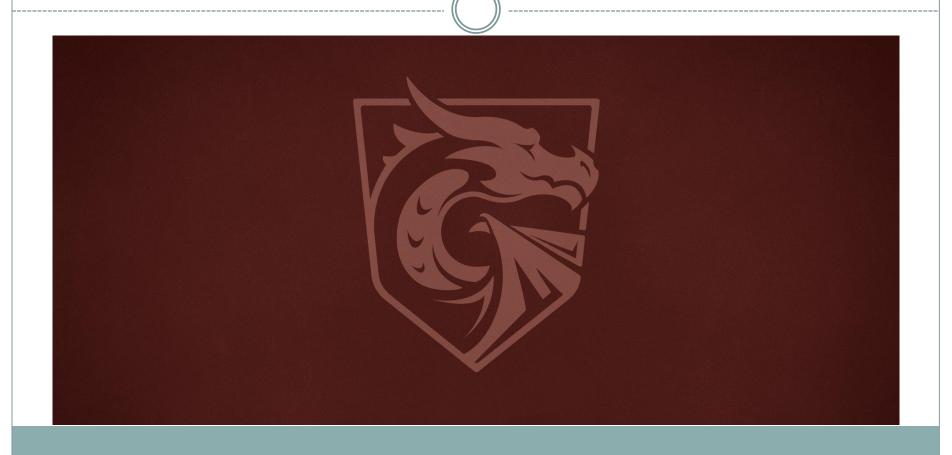 - Copies of the Form can be downloaded from Moodle.

Attendance Policy

- Attendance is mandatory.
  - There are no makeup assignments, quizzes, presentations, etc.

- You MUST sign the **Attendance Sheet** to prove your presence in class.
  - If you are <u>more than 15 mins late</u>, you will be considered absent.

- Unexcused absences will have an effect on your final grade.
  - Excused absences due to sickness, family emergency, or school-approved activity are not affected by this policy.
  - Email the instructor about any absences.

# of Unexcused Absences	Points deducted from final grade
1 or 2	10 points
3	20 points
4	30 points
>5	40 points

Project Courses
The Path through DigiPen

DigiPen Projects

	RTIS	BSGD	BAGD	BFA
Semester 1	GAM100		DES100	
Semester 2	GAM150		GAM120	PRJ101
Semester 3	GAM200		GAM205	*PRJ202*
Semester 4	GAM250		GAM255	*PRJ252*
Semester 5	GAM300	GAM302		*GAT399*
Semester 6	GAM350	GAM352		*PRJ352*
Semester 7	*GAM375 or GAM400*			*PRJ402*
Semester 8	*GAM 400 or GAM450*			

- *Italics are optional classes*

GAM 100: Project Introduction

- RTIS and BSGD

- Text-based game.

- Use Visual Studio to create a console application.

- Work in teams of 4:
  - Each team must have at least a member of each degree.
  - Project is programmed in C.

GAM 150: Project I

- RTIS and BSGD

- Create a game prototype using C.
  - Students can use C++ if they want to (although is not required).

- Work in teams of 4 with a member from each degree.

- Project is developed from scratch. Only graphics library is provided.

GAM 200/205 to GAM 250/255: Project II

- RTIS, BSGD, and BAGD.
  - BFA Optional

- Develop a 2D game from scratch.
- Teams of three or more.
  - Teams determine size and composition.
  - Teams "pay" a percentage of grade for larger teams.
  - No solo projects are permitted.
- Grades determined using Certification Requirements:
  - i.e. ACR's, DCR's, TCR's, etc.

GAM 300/302 to GAM 350/352: Project III

- RTIS, BSGD, and BAGD.
  - BFA Compulsory in GAM300, optional in GAM350

- Develop a 3D game from scratch.
  - This is your portfolio piece!
- Teams between four and seven.
  - Teams determine size and composition (1 student from each degree)..
  - Teams "pay" a percentage of grade for larger teams.
  - No solo projects are permitted.
- Grades determined using "certification requirements"
  - i.e. ACR's, DCR's, TCR's, etc…

GAM 375: Advanced Project

- Take the GAM 300-350 project and upgrade it to a professional level.

- Grades are determined on student objectives.

GAM 400 / GAM 450: Project IV

- Most limitations removed.

- Develop a demo or technical demo.

- Game projects may use an existing engine.

- Team or solo projects allowed.

- Requirement: Project must showcase your abilities.

GAM 390 / GAM 490: Internship

- Internship in a company.
  - Get experience in a working environment.

- This replaces GAM 400 and GAM 450.