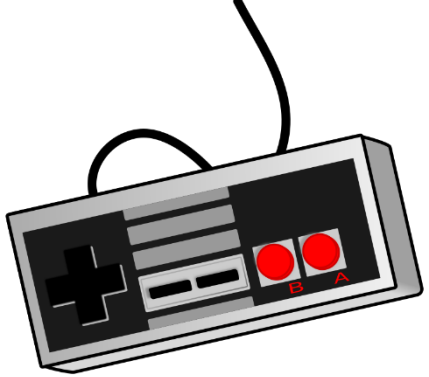

Game PreProduction

420-141-VA - GAME PROGRAMMING 1 - VANIER COLLEGE

Objectives

1. Project Guidelines
2. Project Requirements
3. Delivery Schedule
4. What is a good project?
5. Brainstorming and Generating Game ideas
6. Converting an idea to a Game Concept
7. Student Game Projects
8. Writing a Game Proposal

1. Project Guidelines

Which game? Any game, but be realistic about what you can make.
Create an Original Game with the **Greenfoot** Engine

Methodology:

1. Write a game proposal for the instructor to approve,
2. write a game design document,
3. make the game and present it to your classmates

Teams of 3 members

- Pick classmates in your section

2. Project Requirements

Original game providing 1 minute of engaging gameplay!

- Splash screen (3 seconds) showing the Vanier Logo, Game Programming 1 and names of team members
- Start screen with the name of your game
- Implementation of at least 2 core mechanics
- Interactions triggered by player's inputs
- Visual and audio feedback for each game interactions
- Background music

3. Delivery Schedule

1)	**Game Proposal + Team members**	October 18
2)	**Game Design Document**	November 8
3)	**Game Project Implementation**	November 29
4)	**Project Presentation + PPT Slides**	December 3 and 4

4. What is a good project?

Focus on Awesome per Second!!

https://www.youtube.com/watch?v=lyFSbm79uBY

5. Brainstorming and Generating Game Ideas

➢ Getting an Idea

You can find game ideas anywhere

- Dreams of doing something or achieving a goal
- From media such as books or movies
- From other games

When evaluating ideas, remember that the game must provide entertainment

➢ The First Idea

Most games begin with a single idea, typically revolving around:

- A character
- A setting
- A story
- A philosophy
- A new technology
- …

➢ Originality?

Sometimes the idea is completely original, but more often it may build on existing work.

- Totally new ideas are great, but also unproven and untested.
- New variations are usually safer, and probably more easily accepted by game publishers.

So, while you do need something new, innovative or interesting, it's OK if there are some similarities to existing games.

Inspiration

- Books, plays, films, real life incidents, …
- Immerse yourself in games - play, play, play…
- Many projects start with some variant of an existing game.
- New mechanic
- New content
- New technology

➢ Brainstorming

"The best way to have a good idea is to have a lot of ideas and throw out all the bad ones."

– Linus Pauling

Brainstorming Steps

- Write down every idea.
- Do not criticize other's ideas.
- Set a time limit.
- Seed the discussion
- Quantity and not quality
- Encourage others
- Seek outrageous and humorous ideas.
- Build on and by modifying existing ideas

➢ Generating Game Ideas – Approach 1

Start with **genre, setting, premise, & overall narrative**

Advantages:

- Easy to brainstorm this way
- Good settings can make a game seem very original
- Good for designing to a specific audience

Disadvantages

- Can get trapped into genre conventions
- May not lead to great game mechanics
- Can lead to unfocussed, overly complicated games

➢ Generating Game Ideas – Approach 2

Start with **gameplay challenges & game mechanics**

Advantages

- Most truly original games have original mechanics
- Tends to lead to simplicity and elegance

Disadvantages

- Very hard to do without first framing a genre
- Difficult to brainstorm good game play
- Can lead to trivial or overly abstract settings
- Difficult to sell to publishers

➢ Generating Game Ideas – Approach 3

Start with **user experience (e.g. see, hear, feel)**

Advantages

- Can draw upon personal gaming experiences
- Provides an excellent overall game vision
- A very player-centric approach
- Can exploit great technology

Disadvantages

- Also hard to do without first framing a genre
- Hard to turn into a cohesive game idea
- Often leads to very long development times

➢ Brainstorming Session Example

6. Converting an idea to a game concept

➢ What Attitude Do You Need

Bold vision shared by the entire team

1. Game's general idea
2. The target audience
3. The player's role

Once fixed, should not change your mind

Various aspects of the vision may change (probably will change).

- Rarely does the final game resemble what you originally conceived.

➢ What Attitude Do You Need (cont.)

Always champion new ideas, not reject them immediately; less good ideas will drop out.

- Look for gems in the rough

It is the team (not the individual) which owns the idea (good or bad).

In a class team, each one of you is the lead.

- Set a good example, encourage other members. Champion their ideas.
- There is no weak member!

➢ What Attitude Do You Need (cont.)

Be willing to let go; some work/resources are bound to be cut from the final game.

- "Sunk cost"

Eyes on the prize – don't get overly enthusiastic about any one element.

- It is the whole game delivered that matters.
- Don't get it perfect; get it done.

➢ What Attitude Do You Need (cont.)

Don’t keep adding features, or keep non-essential features.

- Keep them for future enhancements/games.
- Target a minimum feature set.

Respect all aspects of development.

- Respect your and your team’s limitations.
- Be flexible about accommodating how people get work done.
- Respect previous games; there are no new ideas.

➢ Game Industry - Major Milestones

Pre-Production

Production

Final Stages

➢ Development Schedules

Begin with a list of regularly spaced calendar milestones:

- Game Proposal
- Game Prototype
- Play testing Build
- Complete Game

Then work backwards from milestones to set of tasks needed for achieving that milestone.

Make time estimates for each task.

Work out task dependencies (A → B).

Assign tasks to team members.

- One task per team member in a time slot.

Create your project schedule.

➢ Some Best Practices

- Build early - A *critical* early milestone is a working prototype.
- Engineers are overly optimistic in giving their time estimates.
  - Break down features into tasks that each take a few days.
- Fix existing systems; don't rewrite from scratch.
  - Try not to build everything from scratch.
- Cut features, if the tasks for that feature do not fit into the time schedule.
- Test and fix bugs continually

➢ Consistency in Game Aspects

Consistent quality must be maintained in all game aspects.

Amazing art but average music (music - -).

Two major quality issues in today's games

- Plot (story or narrative)
  - very hard to create truly interactive stories which emerge with game play.
- Animation (robotic and not natural)
  - even if the 3D rendering and effects are superb, poor animation makes player perceive it as being less.

7. Student Game Projects

PLEASE MAKE GOOD GAMES, I WANT TO INCLUDE YOUR GAMES IN THIS POWERPOINT DOCUMENT!