A Technical Game

Project 4

Due dates:
- **Game Idea** Friday, March 16\(^{th}\)
- **Game Plan** Friday, March 23\(^{rd}\)
- **Web Page** Sunday, April 9\(^{th}\)
- **First Playable** Wednesday, April 18\(^{th}\)
- **Final Game** Wednesday, April 25\(^{th}\)

Introduction

- Build a working game
- With focus on one or more technical components
- Does not necessarily have to look good or even have innovative game design
- But should be playable

- You will work in groups of 3 for this project
Details

• Series of milestones
• Idea
• Plan
• Web Page
• First Playable
• Final Playable
• Game Fest
• (More next)

Game Idea

• Brief document with overall game idea
• The Development Team
  - Names and email address of team members
• Working Game Name
  - Can change before the final game
• Overview
  - Details relevant to the high-concept of the game
    * the concept, the genre, list of novel features
    * One-sentence description describing your game
• Technical focus
  - The concentration of the development efforts
  - At least one and no more than two areas of technical focus
  - Examples include: Artificial Intelligence, Networking, Physics, and Graphics
    * Sub-areas and refinement in next section
• Due Friday!
• Expect to write about 1 page
Game Plan

• Details on the how the game will be built
• The Game Name and the Development Team (as before)
• Game summary
  - Attention-grabbing paragraph describing game,
  - Provides high-level view of the game play, game genre, and novel features
  - Highlight the technical focus
• Implementation
  - Programming languages and platforms
  - Frameworks, libraries or game engines to be used
  - Previous work or downloaded code to be used
  - Art (art, music, story, sound) assets, created or copied (credits given)
  - Most important: technical focus
• Roles
  - Leader - calls meetings, checks and adjust schedule
  - Scribe - takes notes during meetings, maintains Web pages docs (all write), todo list
  - The roles should switch at least once during term!
• Schedule
  - Include milestones with dates
  - Distribution of tasks to team
  - Refer to schedule during meetings!
• Expect to write 2-3 pages
• Will be updated and turned in with final game

Web Page

• A Web page for you game designed to show it off
• A front-end to the game, suitable for a portfolio.
• Included aspects will likely include:
  - Picture(s), including custom artwork or screenshots (or both)
  - Text with game description information.
  - About information (names, contact, version info, etc.)
• Download info (with appropriate install or run instructions)
• Can have multiple sections or multiple pages
  - Home, Development Credits, Instructions, Download.
• Can have links internally (timeline, etc.). These should be removed for the final project.
First Playable

- Allow a player to interact with the game
  - Experience core gameplay.
- Completed the technical focus
  - Minus final testing (ie- there still may be some modest bugs)
- Will be shown to the class in a presentation
  - Practice presentations for interviews, etc.

Final Playable

- (Similar to "Alpha" release of a game with one level)
- All of the required features implemented
- Tested to eliminate any critical gameplay flaws and bugs
  - May still contain a certain amount of placeholder assets.
  - May exhibit minor bugs
- Should have at least one level designed and tested
- Updated version of Game Plan
  - What you actually did do.
- Shown to class in a presentation
- Played by class members during game fest
Notes

• Your choice:
  - Language (C, C++, Java...)
  - Graphics libraries (OpenGL, DirectX, Ogre, Lightweight Java Game Library...)
  - Engines (Torque, C4, Game Maker, Golden T Game Engine, ...)
• Consider language you are familiar with
  - Don’t want to spend too much effort fighting with the language
• Consider using a engine/libraries that take care of technical parts of the game not focus of your implementation
• Previous code you developed is allowed, but need documentation
• Focus on technical, so don’t spend too much time on art
  - Encouraged to borrow art assets (music, sound effects, models, textures, sprites, tiles)
  - Freely available sources (if want to use for portfolio)

Grading

• Guidelines on Web page
• Idea  10%
• Plan   20%
• Web Page 10%
• First Playable 20%
• Final Playable 40%
Hints

• Early buy in to idea by all
  - More motivated if all like idea
• Time management
  - Need to balance group project with individual projects
  - All members do individual, so can plan accordingly
• Keep regular group meetings
  - Stick to roles, provides focus
  - Work effectively as a group (see Links)
• Revision control
  - CVS, Sourceforge
• Use as opportunity
  - Learn something new
• Have fun!