CS 498

Video Game Design & Development Methodologies

(For internal use only)

Admin Stuff

- Dan Cermak
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Who am I?

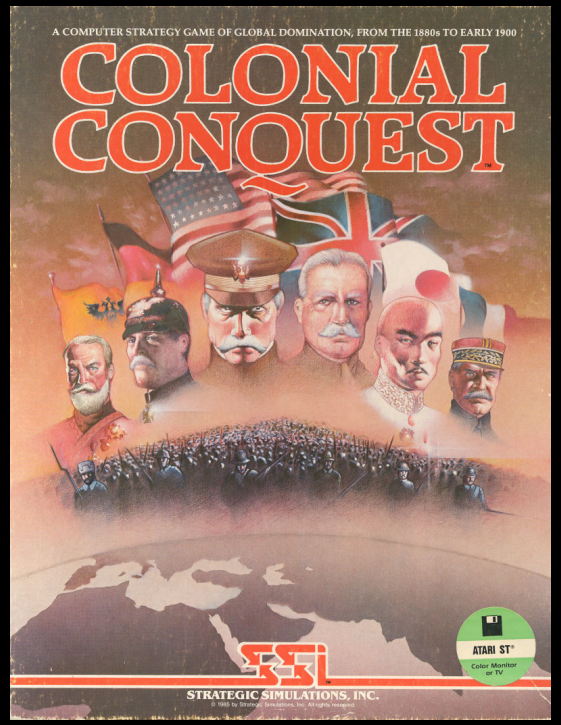
35 years in the video game industry

Self taught programmer
- Designed, programmed & shipped 2 games

Spent 11 years doing external development
- Taught me communication and information gathering

Basically a production guy with lots of design input
- Game development from all sides

Last 15 years I was responsible for Volition game Dev.
- Experimented with various structures/methodologies



My 30 Game Industry Career had its ups and downs

SSI: Developer and Publisher – PROS

- Amazing people
- The golden age, worked on every kind of game imaginable
- Produced in every genre (Sports, RTS, RPG, Adventure, Wargames, & Shooters)
- Learned production processes
- Filled about every position in the hierarchy

SSI: Developer and Publisher – CONS

- Did external production primary, missed some team management processes
- The company was privately owned, couldn't sustain itself
- Had to sell (3 times) and each new buyer was an adventure in ineptitude
- Went through a layoff

My 30 Game Industry Career

EA: Westwood – PROS

- Great group of people, very professional
- Interfaced with EA Studio Execs daily
- Learned a lot of high-level elements
- Got to meet some amazing designers

EA: Westwood – CONS

- EA Studio Management was broken, politics & BS.
- Studio had an odd culture of secrecy, & mistrust
- Studio direction was off…

My 30 Game Industry Career

Volition: - PROS

- Latitude to set structure and process
- Really smart, amazing teams
- Great culture
- Saw some success, SR3 hit 6 million
- Location meant that corp. stayed away

Volition: - CONS

- 2 Product lines in cycle, 1 wasn't a hit
- Stockholders meant time constraints
- To be AAA (high end), you need big bucks
- Location made it tough to hire
- Bankruptcy

CS 498 Goals and Expectations

General

- Set up the project teams as soon as possible
- Complete the projects via a simplified project plan
- Discuss game development (design elements, key considerations)
- Go into more detail about the Design and Production processes
- Present a survey of the video game industry, studios and projects

CS 498 Projects

Projects

- Small game projects of your own design
- Team sizes of 4-5 preferred (we prefer not to create 6 person teams)
  - Consideration is given to those that want to work together
  - We also consider the student tenure (3 seniors could be considered okay)
  - A survey will go out shortly to see what you are interested in creating
- Develop the key elements of the projects via a set of templates
  - Figure out an initial game vision
  - Get the Game World or Environment clearly defined
  - Project Plan details
    - High & Mid-level design
    - Simple production documents
- Experience tells us that design scope is usually the biggest issue
  - Documentation & ongoing development (progress throughout the semester) are key to success

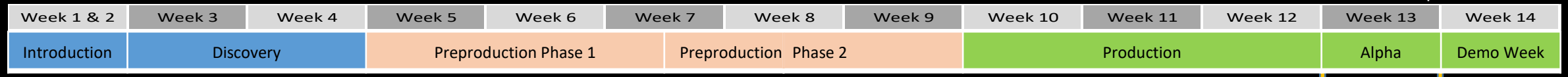
Game Production: What we are going to do

Proof Of Concept

Production

Alpha
(Feature Complete)

Beta
(Content Complet



Alpha

Beta

Proof Of Concept

- Discovery: 2-week Milestone
- Pre-Production Phase 1: 2.5-week Milestone (Core Systems)
- Pre-Production Phase 2: 2.5-week Milestone (Vertical Slice)

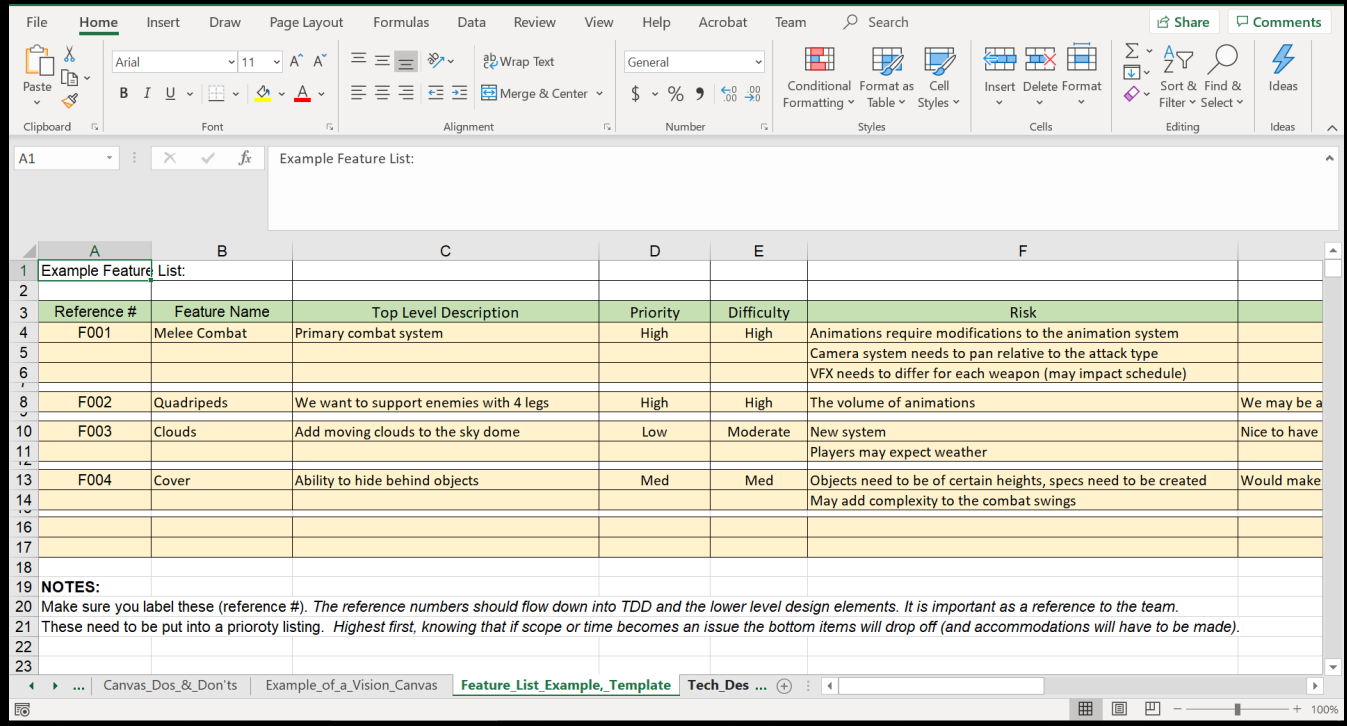
Production

- Production Phase: 3 weeks
- Alpha & Beta: 2 weeks

CS 498 Project Plan

Google Sheet Workbook

- World Description Template
  - Could easily be a Word or Docs File
- Vision Canvas Template
  - includes a Dos & Don’ts version
- Feature List Template
- Technical Design Template
- Asset list (cumulative for all milestones)
- 3 Milestone Templates
- QC Test Plan Template



Example Feature List:

Reference #	Feature Name	Top Level Description	Priority	Difficulty	Risk	
F001	Melee Combat	Primary combat system	High	High	Animations require modifications to the animation system	
					Camera system needs to pan relative to the attack type	
					VFX needs to differ for each weapon (may impact schedule)	
F002	Quadripeds	We want to support enemies with 4 legs	High	High	The volume of animations	We may be a
F003	Clouds	Add moving clouds to the sky dome	Low	Moderate	New system	Nice to have
					Players may expect weather	
F004	Cover	Ability to hide behind objects	Med	Med	Objects need to be of certain heights, specs need to be created	Would make
					May add complexity to the combat swings	

NOTES:

Make sure you label these (reference #). *The reference numbers should flow down into TDD and the lower level design elements. It is important as a reference to the team.*

These need to be put into a prioroty listing. *Highest first, knowing that if scope or time becomes an issue the bottom items will drop off (and accommodations will have to be made).*

This is abbreviated because we are building the design and project in one semester