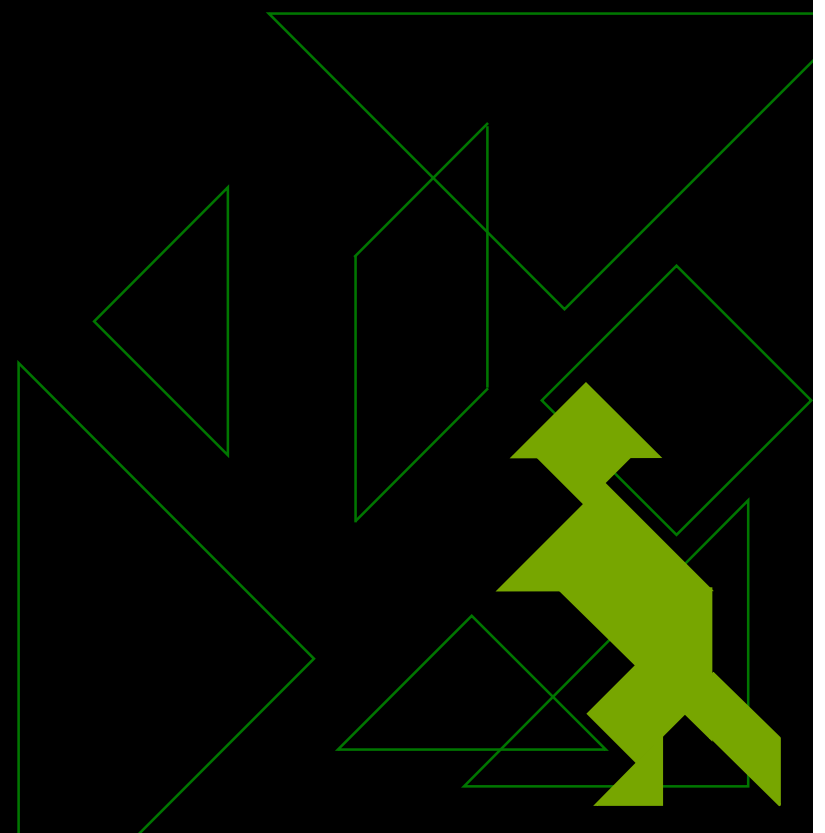


# Getting the ball rolling – Game Production Overview

Dr. Alma Barranco

# Agenda

- ◆ Developing a computer game
- ◆ Team roles
- ◆ Small teams vs. large productions
- ◆ Game development methods
- ◆ Production Cycle
  - Pre-production
  - Production
  - Testing
  - Post-production
- ◆ Brainstorming activities
- ◆ Summarize
- ◆ Next steps



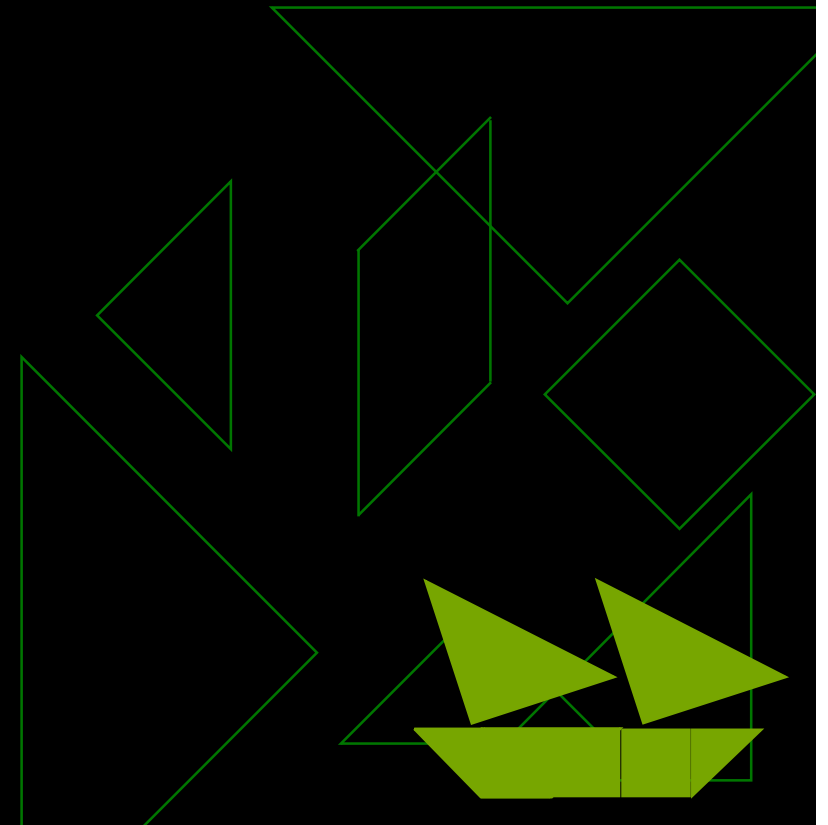
# Developing a computer game

- ◆ Collective effort.
- ◆ Strong hierarchies, relative independence.
- ◆ Weird models: it is software development, it aspires to work like films, it usually ends up like a team based sweatshop.
- ◆ Talents from very many disciplines

# Team roles

## ◆ Categories

- Design
- Engineering
- Visual Arts
- Audio
- Production
- Corporate

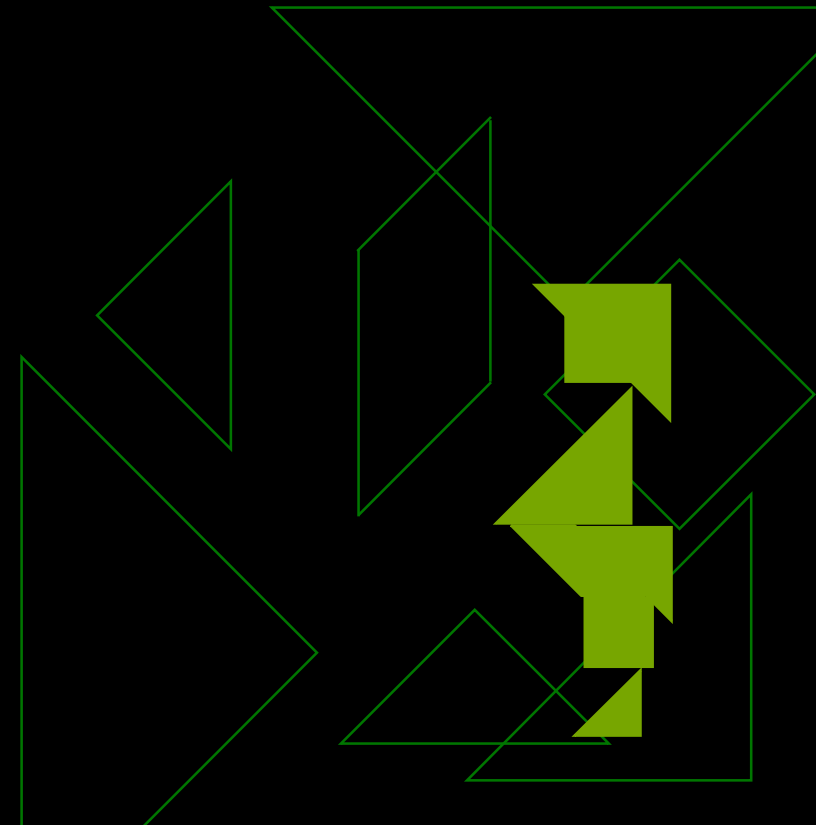


# Production

- ◆ Executive Producer
- ◆ Producer or Project Manager
- ◆ Developer Producer or Technical Project Manager
- ◆ Associate Producer or Team Lead
- ◆ Lead Tester
- ◆ Game Tester
- ◆ QA

# Design

- 
- ◆ Creative Director
  - ◆ Game Designer
  - ◆ Lead Designer
  - ◆ Level Designer
  - ◆ Writer/Scriptwriter

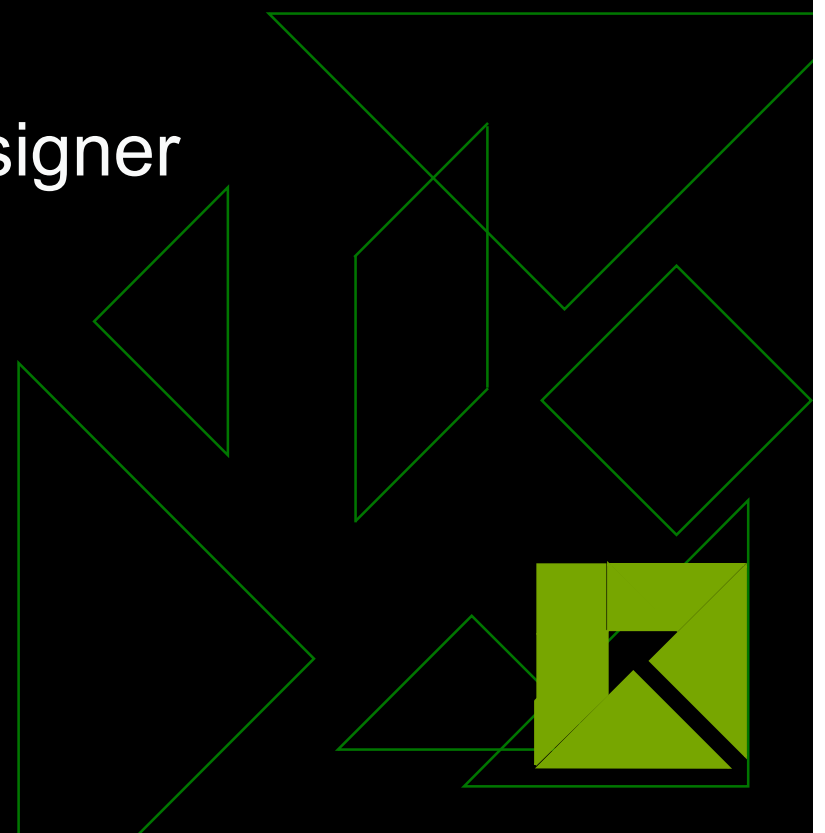


# Engineering

- ◆ Technical Director
- ◆ Lead Engineer or Chief Architect
- ◆ Engine/Tools Engineer
- ◆ Chief UI Designer
- ◆ Graphics Engineer
- ◆ AI Engineer
- ◆ Multiplayer Networking Engineer
- ◆ Configuration Manager

# Visual Arts

- ◆ Art Director
- ◆ Lead Artist
- ◆ Concept Artist
- ◆ World Builder or Level Designer
- ◆ Asset Artist
- ◆ Animator
- ◆ Technical Artist
- ◆ Marketing Artist





# Audio

- ◆ Sound Engineer/ Sound Designer
- ◆ Composer
- ◆ Audio Engineer/ Audio Programmer

# Corporate

- ◆ Marketing and Public Relations
- ◆ Creative Services
- ◆ Sales



# Small Teams vs. Large Productions

- ◆ Only large projects and large budgets can have specialization
  - so try to be good at several different things.
- ◆ In this course: we divided the roles accordingly, but remember that you will need to have more than one hat!

# Game Development Methods

- ◆ Business Parameters  $\Leftrightarrow$  Game Idea
- ◆ Academic Parameters  $\Leftrightarrow$  Game Idea
- ◆ A development method is just a systematized procedure to achieve the goal of producing a working product within budget and schedule.

# Three Methods

- ◆ Waterfall
- ◆ Agile Development
- ◆ Unified Development Process

# Waterfall

- ◆ Classic Method: lots of front- end time and defining of functionality, late implementation of mechanics and levels.
- ◆ It's the assembly line of software development.
- ◆ Work moves in one direction, sequentially.
- ◆ Difficult to reverse, difficult to evaluate

# Waterfall Model



Design Document

Functionality  $\Rightarrow$  teams

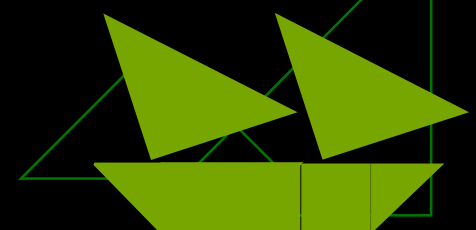


Assets  $\Rightarrow$  teams



# Unified Development Process

- ◆ Classic from software design
- ◆ First, “requirements capture” (what are the user’s/ team’s requirements, and make them into functional software)
- ◆ Then, draw in the center of a piece of paper the game concept, then in outward, radial mode, write the units/assets (“use cases”). •
- ◆ Then join use cases with actors that interact with them. They combine in “relationships”. •
- ◆ Then go develop.



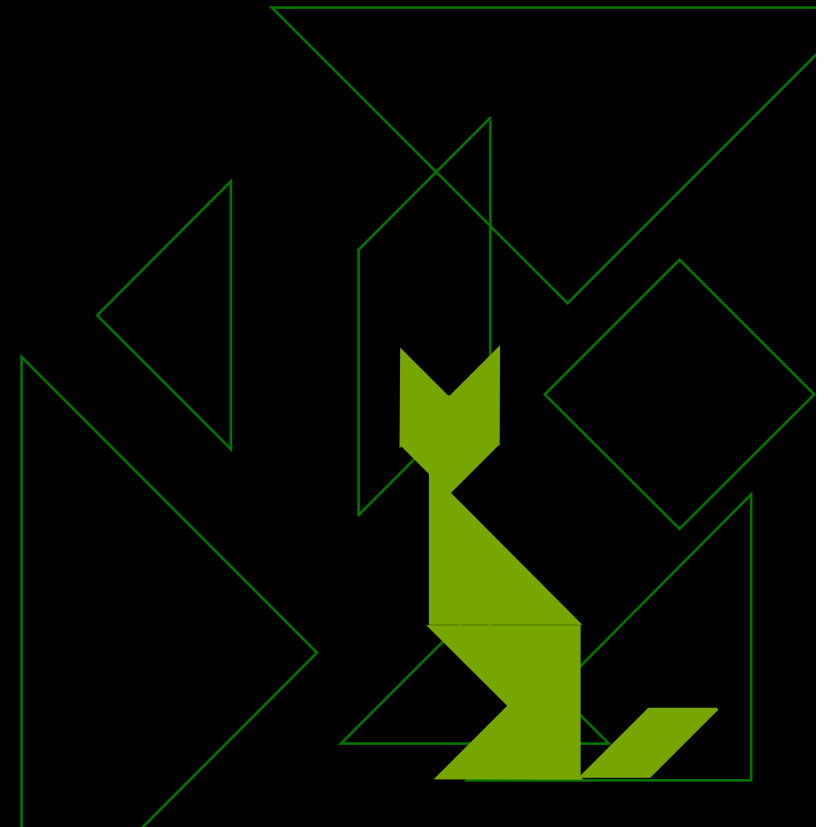


# Agile Development

- ◆ Iterative examples that show “vertical slices” with the most crucial examples/features.
- ◆ Agile is all about team dynamics and team cycles.
- ◆ Production is broken in small cycles or “sprints”.
- ◆ At the beginning of production everybody meets and objectives and teams are set for that sprint.
- ◆ Daily meetings ensure the progression and communication.
- ◆ At the end of every sprint, the product is reviewed/showcased to the client

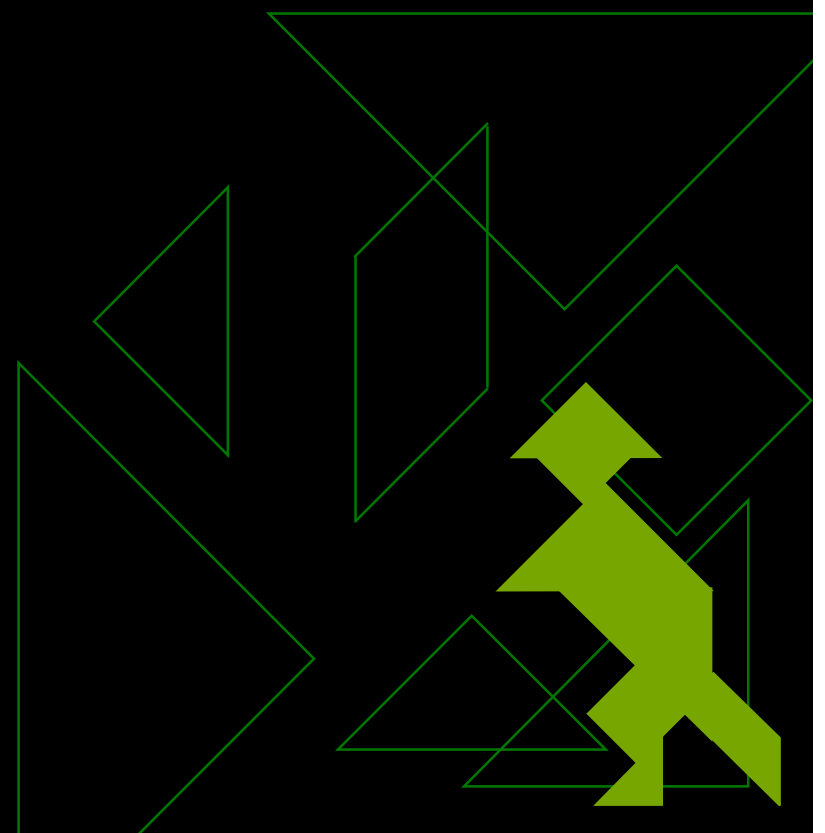
# Production Cycle

- ◆ Pre-production
- ◆ Production
- ◆ Testing
- ◆ Post-production



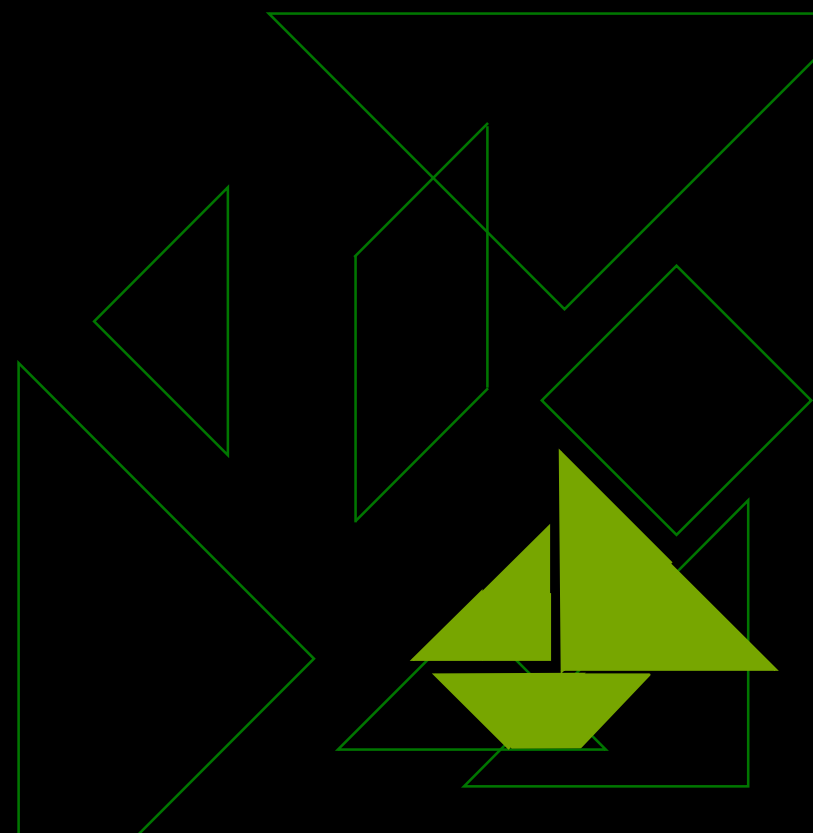
# Pre-Production

- ◆ Game Concept
- ◆ Game Requirements
- ◆ Game Plan



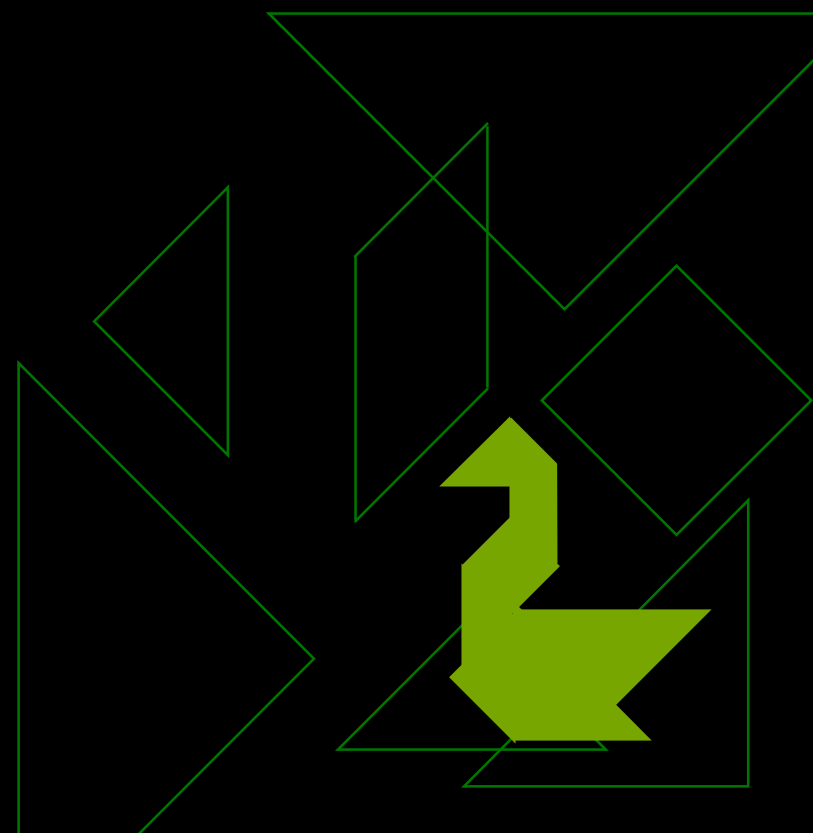
# Production

- ◆ Plan Implementation
- ◆ Tracking Progress
- ◆ Task Completion



# Testing

- ◆ Plan Validation
- ◆ Code Release



# Post-production

- ◆ Learn from Experience
- ◆ Archive Plan

