

# Game Design Process and Tools

Comp-361 : Game Design Process and Tools  
Lecture 3

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People looking for teams?

Teams looking for people?

# Making a game

Pre-Production

Production

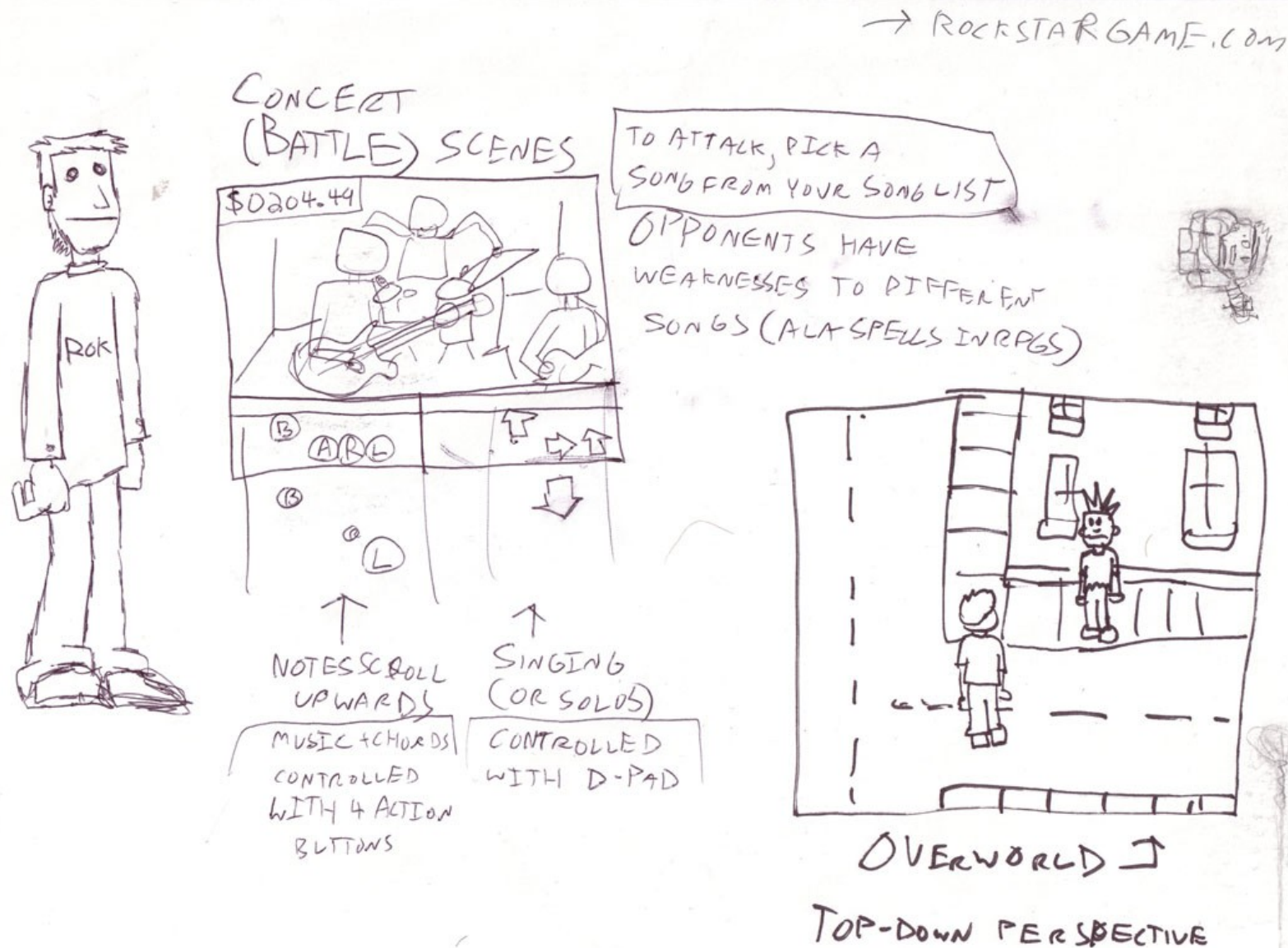
# Who has a game idea?



VS



# Pre-Production : Game Concept



# Pre-Production : Concept Art



Fable 2 – Lionhead Studios



# Pre-Production : Gameplay Demo



Half-Life 2: Lost Coast



# Production : Technology

Buy don't build!



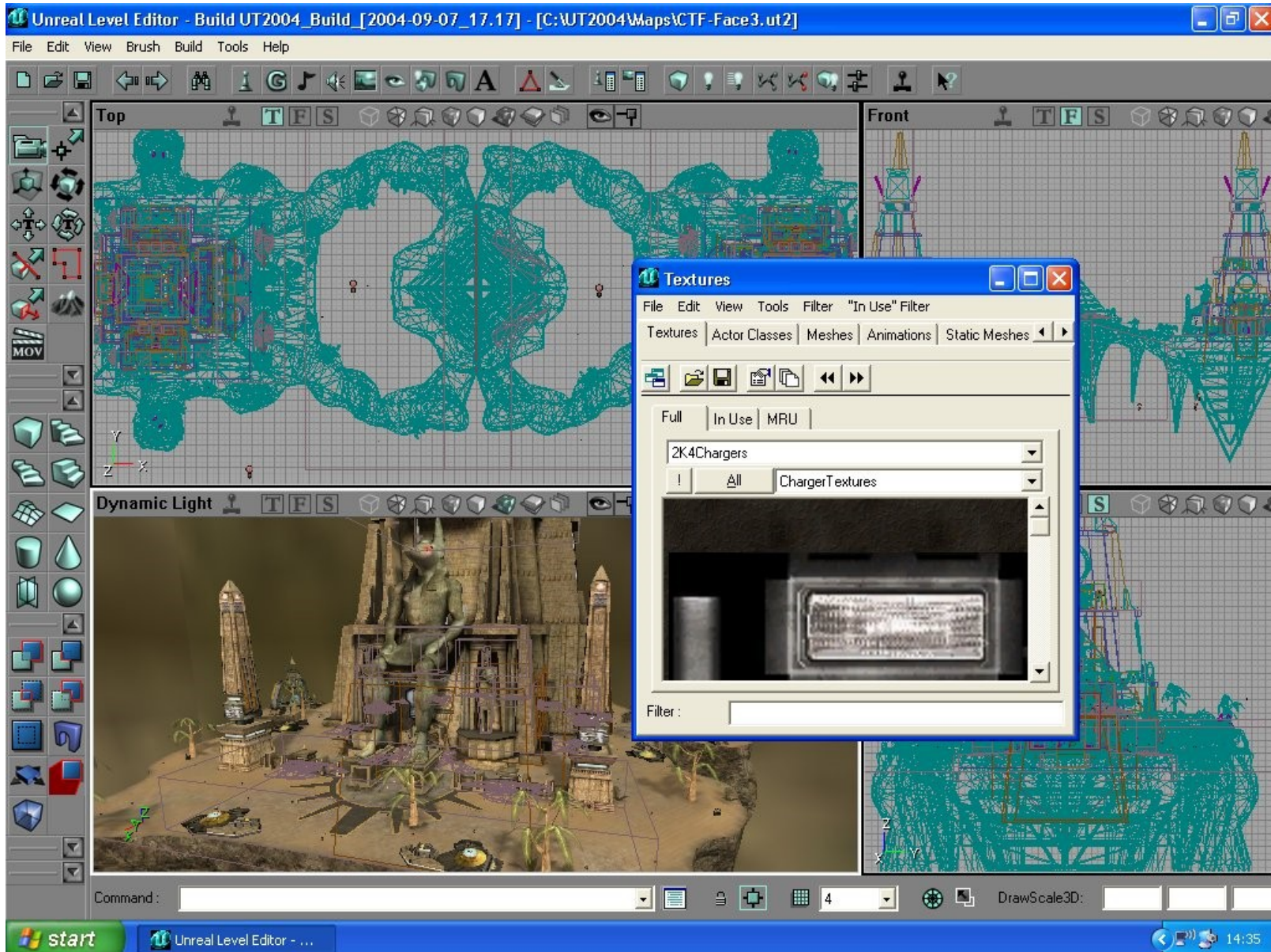
Gears of War 2 : Epic Games



# Games and their engines

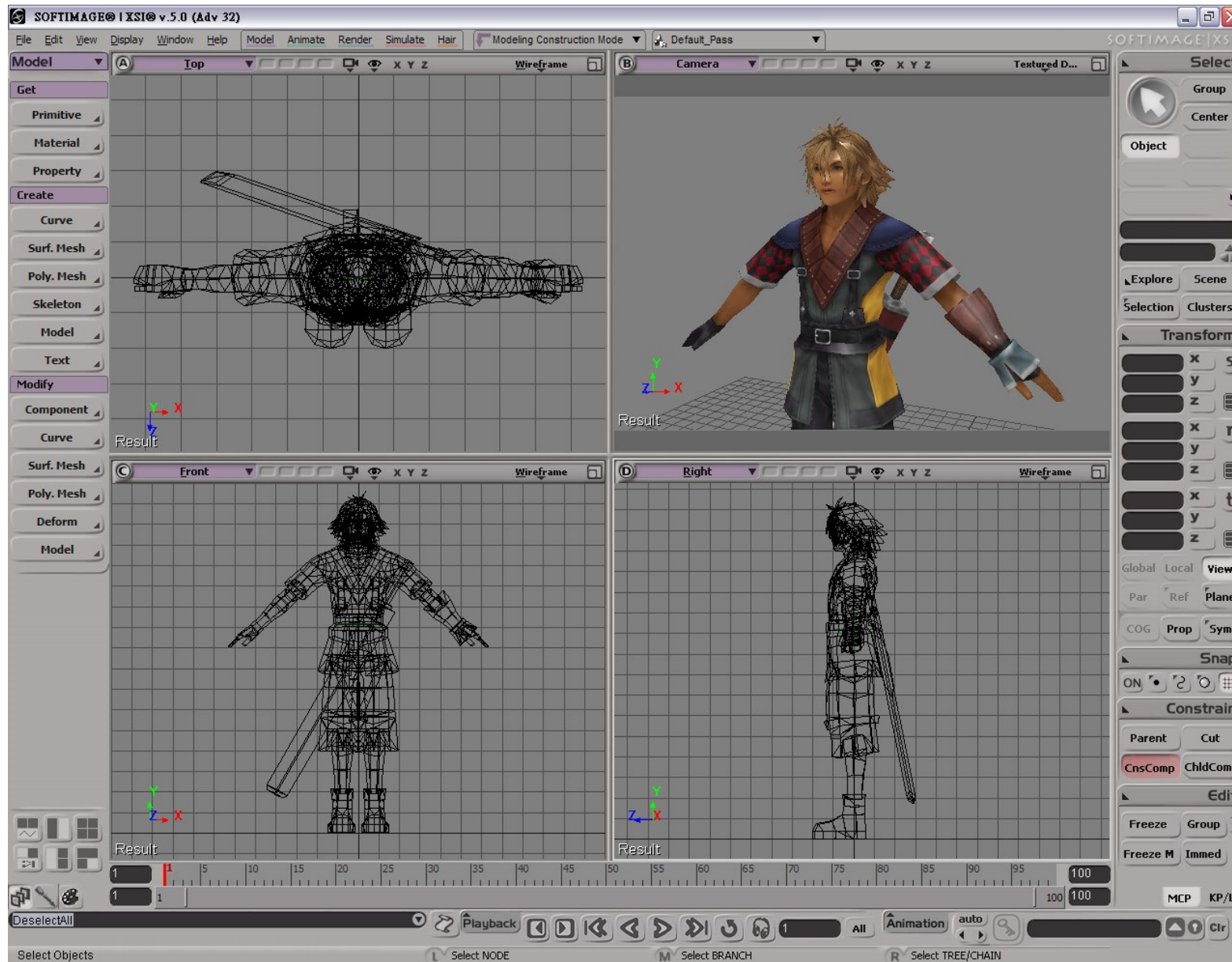
Games are also tech demos

# Production : Tool



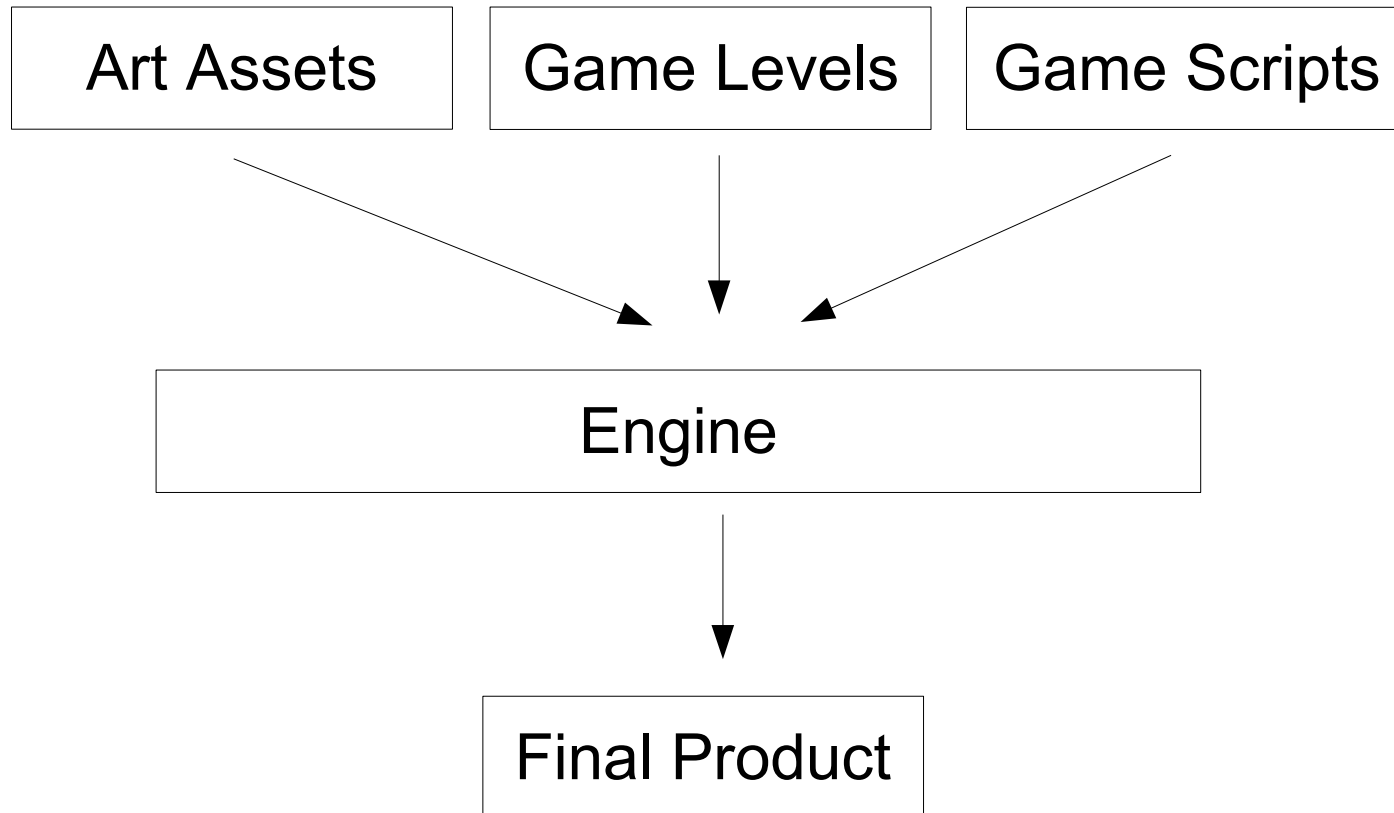
Unreal Editor 2 – Epic Games

# Production : Art Assets



XSI : SoftImage with Final Fantasy character : Square Enix

# Production : Putting it all together





# Production : Testing



VMC Labs

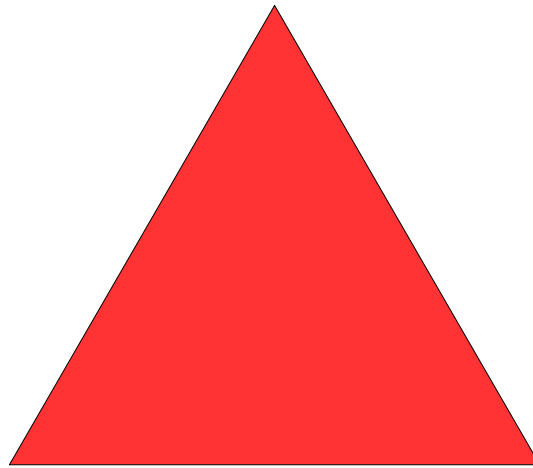
# Shipping and beyond ...



Halo 3 : Bungie Studios

# Components of a Game

Technology



Story

Art

# Question 1

Which Programming language do we want to use?



# Question 2

Do we 2D or 3D graphics?

# Question 3

Which engine do we want to use?

# Things to consider

- How easy is it to learn?
- How much does it cost? Is it free?
- How many people are using it?
- Have other people built games with it?
- What kind of help can I get with it? Documentation?
- What tool support does it have?
- Does it have UI tools or interfaces?
- What platform are we developing on?
- What kind of challenge are we looking for?

# Low, Lower, Lowest

- High level game engines
  - ◆ Unreal engine, Torque
- Mid-level game engines
  - ◆ Minueto, Jmonkey, Irricht, XNA, Pygames, Ogre 3D
- Low-level game engines
  - ◆ Java 2D, OpenGL, SDL
- Lowest-level game engines
  - ◆ Assembly code



# What tools will we need?

- Integrated Development Environment (IDE)
  - ◆ Eclipse, NetBeans, Visual Studio, Xcode, etc ...
- Source Control
  - ◆ Subversion, CVS, Perforce, etc ...
- Development Tools
  - ◆ Jprofiler, JavaDoc, Doxygen
- Information Sharing
  - ◆ MediaWiki, Google Docs, Text files on SVN
- Graphics Tools
  - ◆ Gimp, Blender, Wings 3D, Inkscape
  - ◆ Photoshop, Illustrator, Maya, 3DS Max etc ...

# The Classic Comp-361 Formula

- Language: Java
- Graphics: 2D
- Engine: Minueto
- IDE: Eclipse
- Source Control: Subversion
- Graphic Tools: Gimp

# Next Monday

- You should all have a team by now.
- For Monday, on a sheet of paper
  - ◆ Name of team members, with email
  - ◆ Name of the team (be creative, or I chose for you)
  - ◆ A number between 0 and 100
  - ◆ Course conflict with on Monday/Wednesday between 10h30 and 12h00.