

Character Development for 3D Animation

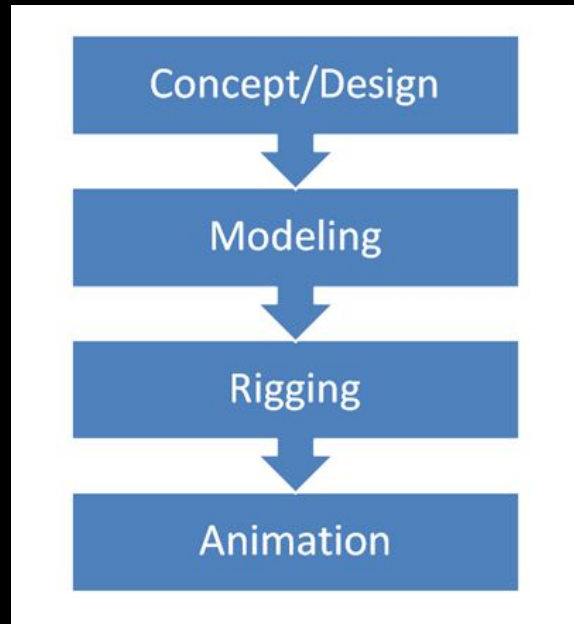
UW CSE 464b, Summer 2017

Build your own character!

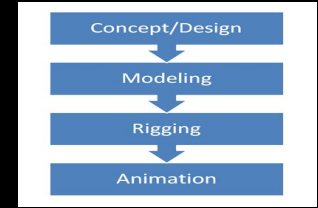
Characters made by last year's class...



Steps for building characters in 3D



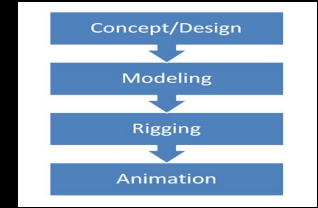
Steps for building characters in 3D



1. Concept Art

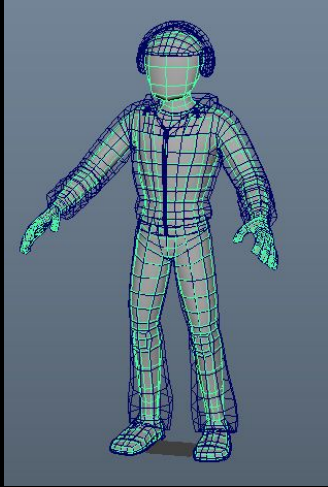


Steps for building characters in 3D

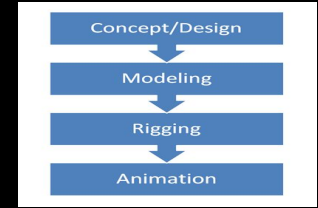


1. Concept Art

2. Modeling



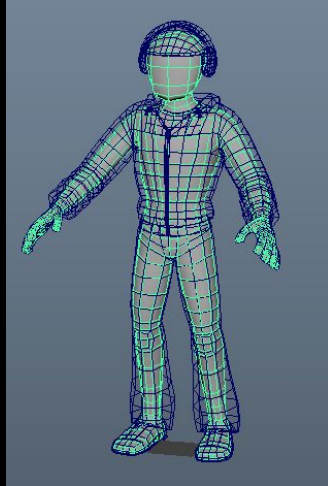
Steps for building characters in 3D



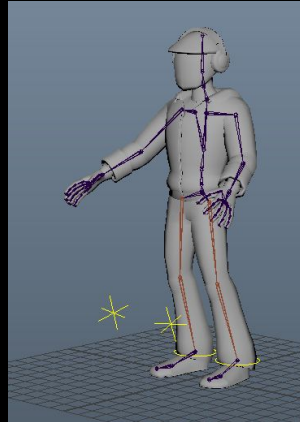
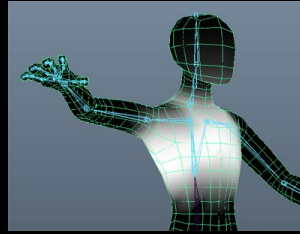
1. Concept Art



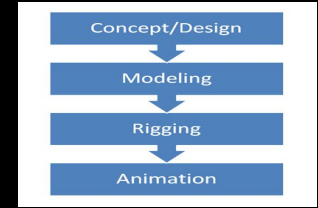
2. Modeling



3. Rigging



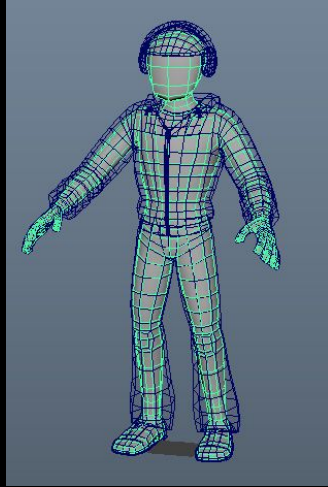
Steps for building characters in 3D



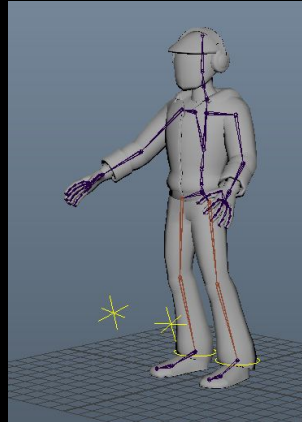
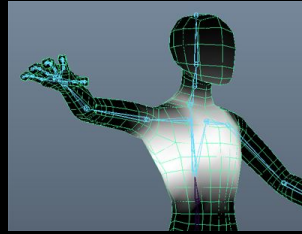
1. Concept Art



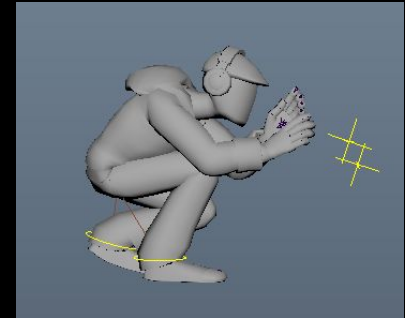
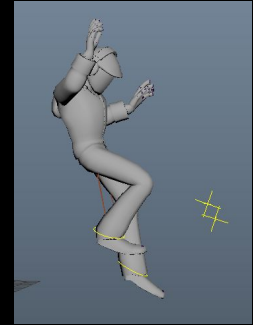
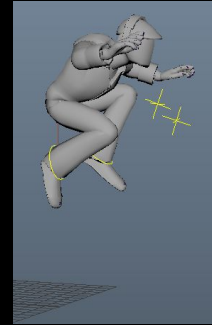
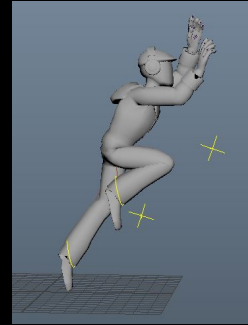
2. Modeling



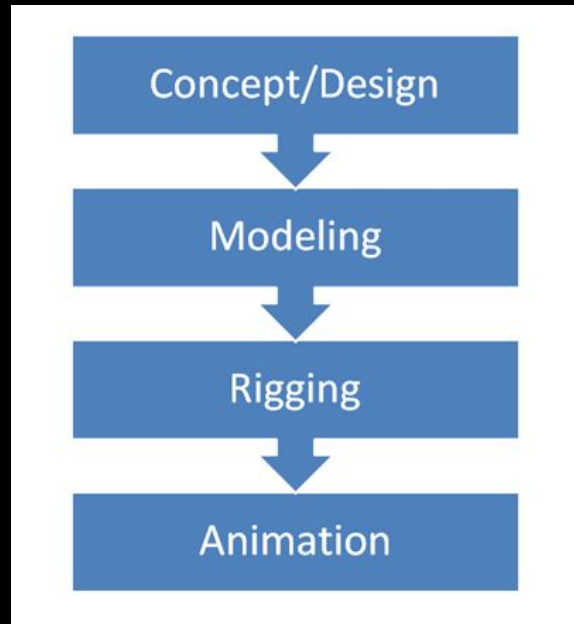
3. Rigging



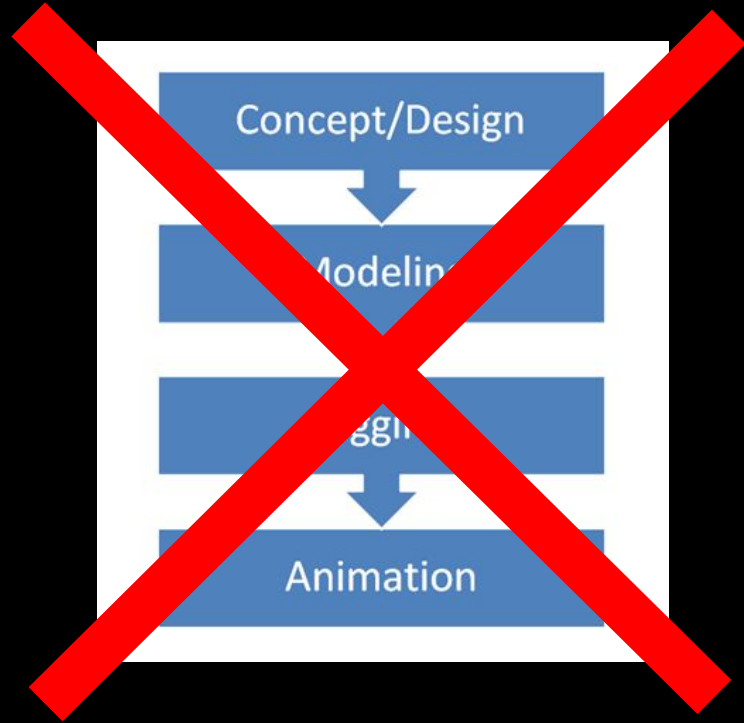
4. Animation



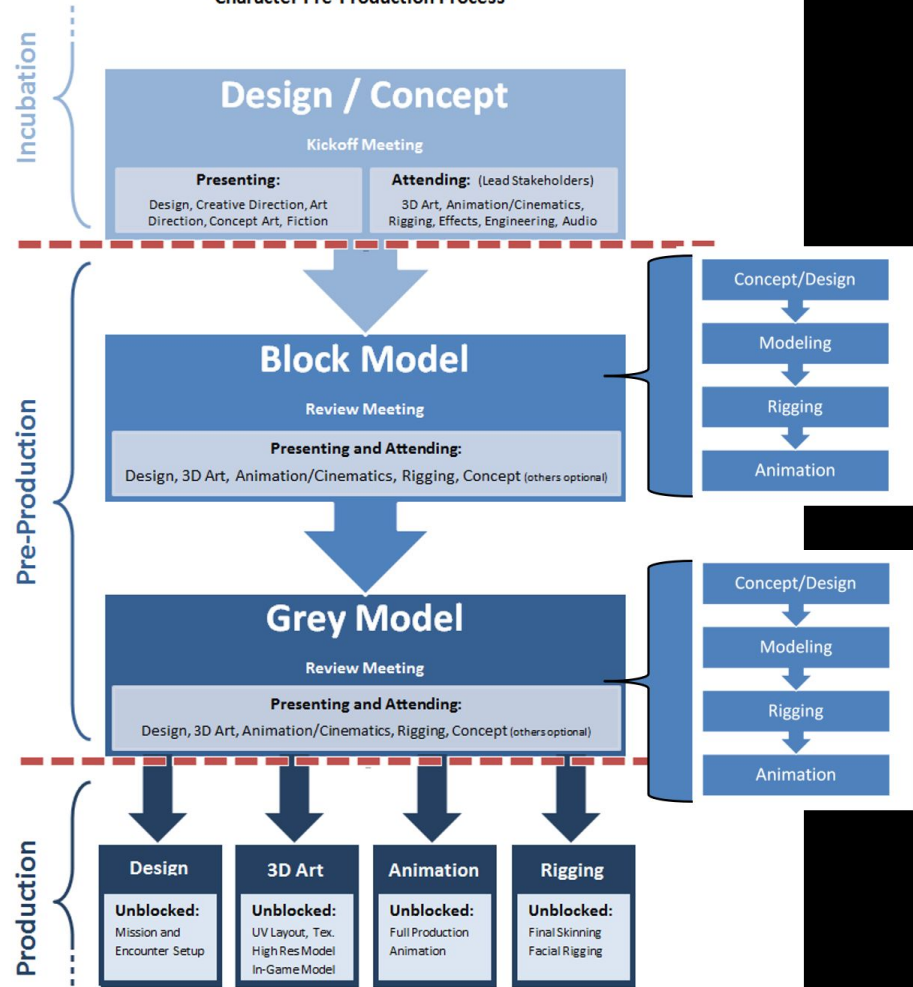
Always works perfectly the first try...

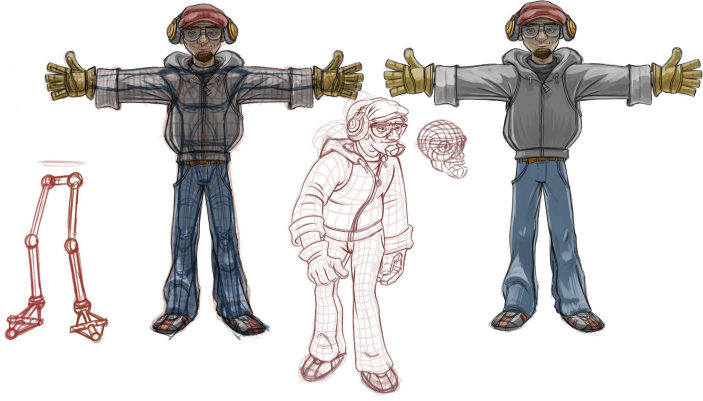


Always works perfectly the first try... NOT!!!



Character Pre-Production Process





Character Pre-Production Process

Incubation

Design / Concept

Kickoff Meeting

Presenting: Design, Creative Direction, Art Direction, Concept Art, Fiction	Attending: (Lead Stakeholders) 3D Art, Animation/Cinematics, Rigging, Effects, Engineering, Audio
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Pre-Production

Block Model

Review Meeting

Presenting and Attending:
Design, 3D Art, Animation/Cinematics, Rigging, Concept (others optional)

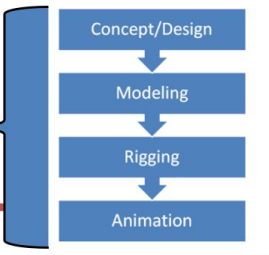
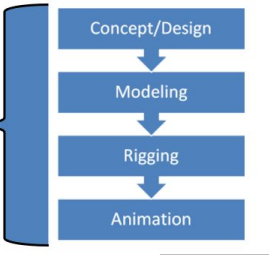
Grey Model

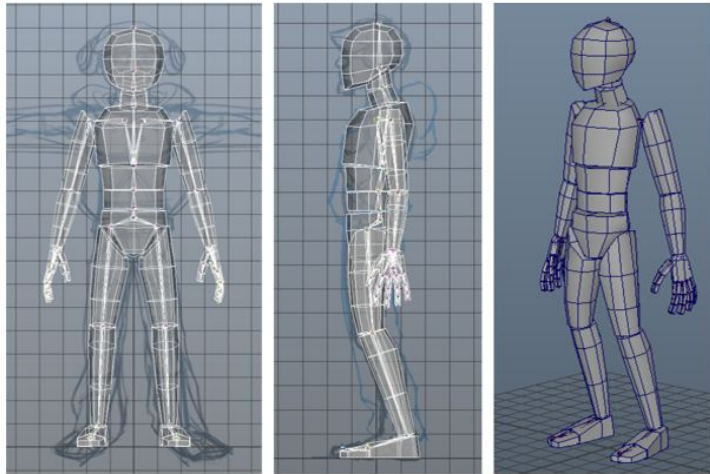
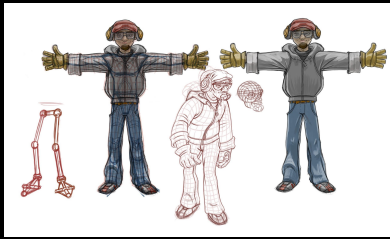
Review Meeting

Presenting and Attending:
Design, 3D Art, Animation/Cinematics, Rigging, Concept (others optional)

Production

Design	3D Art	Animation	Rigging
Unblocked: Mission and Encounter Setup	Unblocked: UV Layout, Tex. High Res Model In-Game Model	Unblocked: Full Production Animation	Unblocked: Final Skinning Facial Rigging





Character Pre-Production Process

Incubation

Design / Concept

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Presenting:

Design, Creative Direction, Art Direction, Concept Art, Fiction

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3D Art, Animation/Cinematics, Rigging, Effects, Engineering, Audio

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Production

Design

Unblocked:
Mission and Encounter Setup

3D Art

Unblocked:
UV Layout, Tex. High Res Model In-Game Model

Animation

Unblocked:
Full Production Animation

Rigging

Unblocked:
Final Skinning Facial Rigging

Concept/Design

Modeling

Rigging

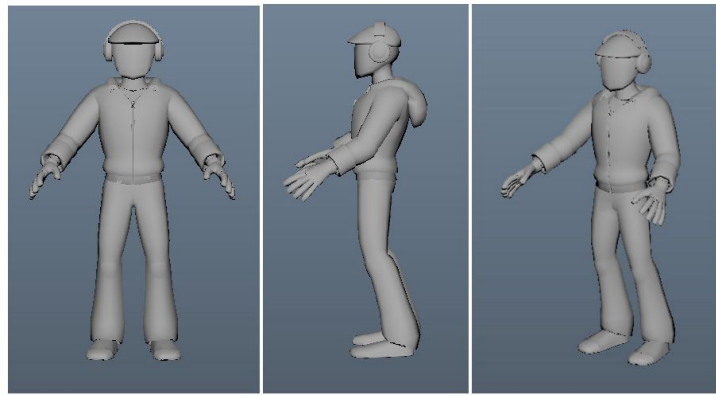
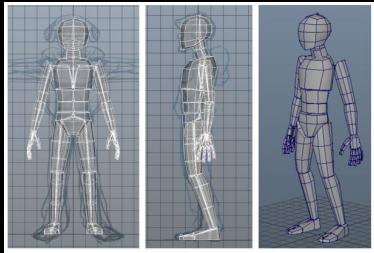
Animation

Concept/Design

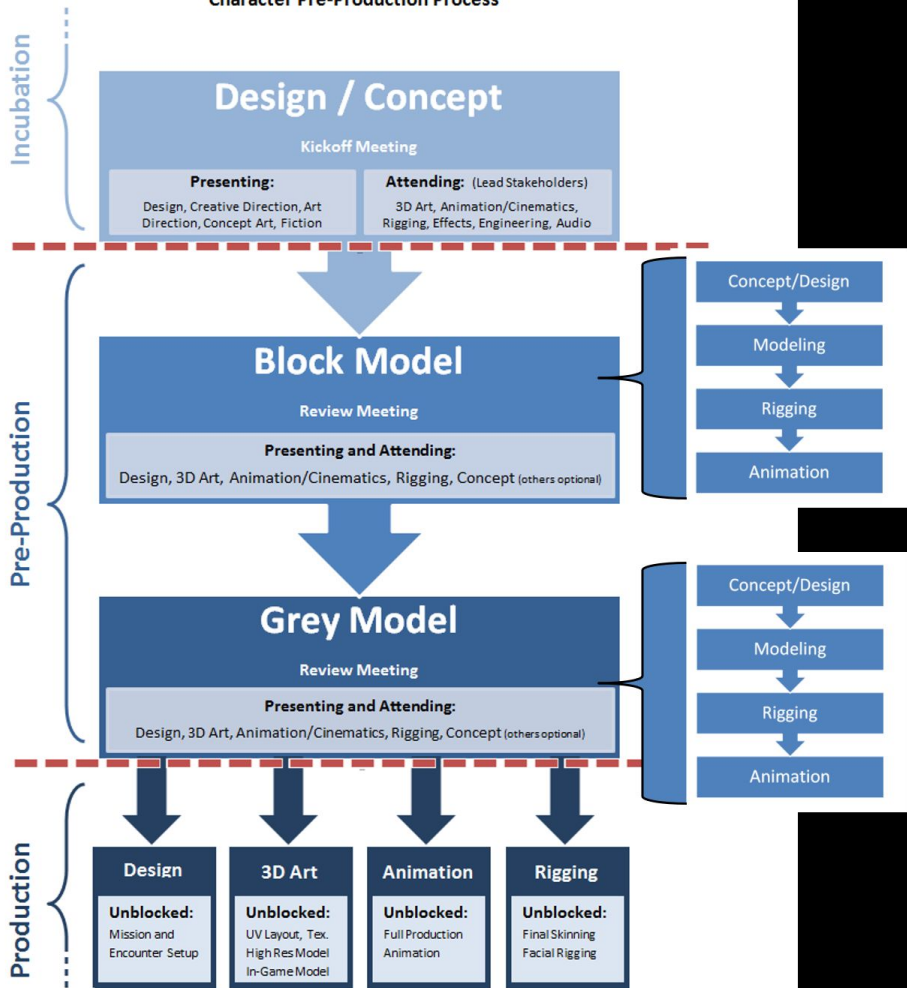
Modeling

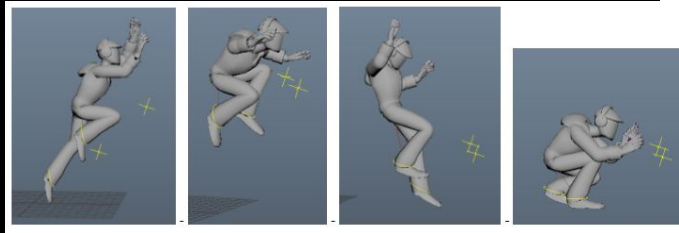
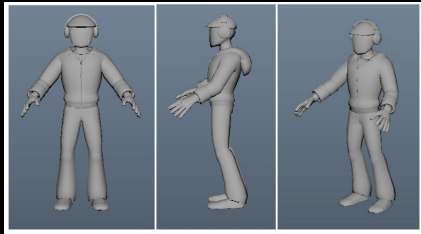
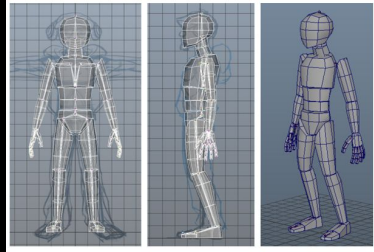
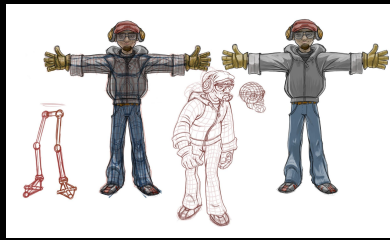
Rigging

Animation



Character Pre-Production Process





Character Pre-Production Process

Incubation

Design / Concept

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Presenting:

Design, Creative Direction, Art Direction, Concept Art, Fiction

Attending: (Lead Stakeholders)

3D Art, Animation/Cinematics, Rigging, Effects, Engineering, Audio

Pre-Production

Block Model

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Unblocked:
Mission and Encounter Setup

3D Art

Unblocked:
UV Layout, Tex. High Res Model In-Game Model

Animation

Unblocked:
Full Production Animation

Rigging

Unblocked:
Final Skinning Facial Rigging

Concept/Design

Modeling

Rigging

Animation

Concept/Design

Modeling

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Animation

Character Pre-Production Process



Design / Concept

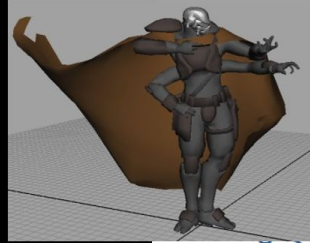
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Presenting and Attending:

Design, 3D Art, Animation/Cinematics, Rigging, Concept (others optional)



Grey Model

Review Meeting

Presenting and Attending:

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Design

Unblocked:
Mission and Encounter Setup

3D Art

Unblocked:
UV Layout, Tex.
High Res Model
In-Game Model

Animation

Unblocked:
Full Production
Animation

Rigging

Unblocked:
Final Skinning
Facial Rigging

Concept/Design

Modeling

Rigging

Animation

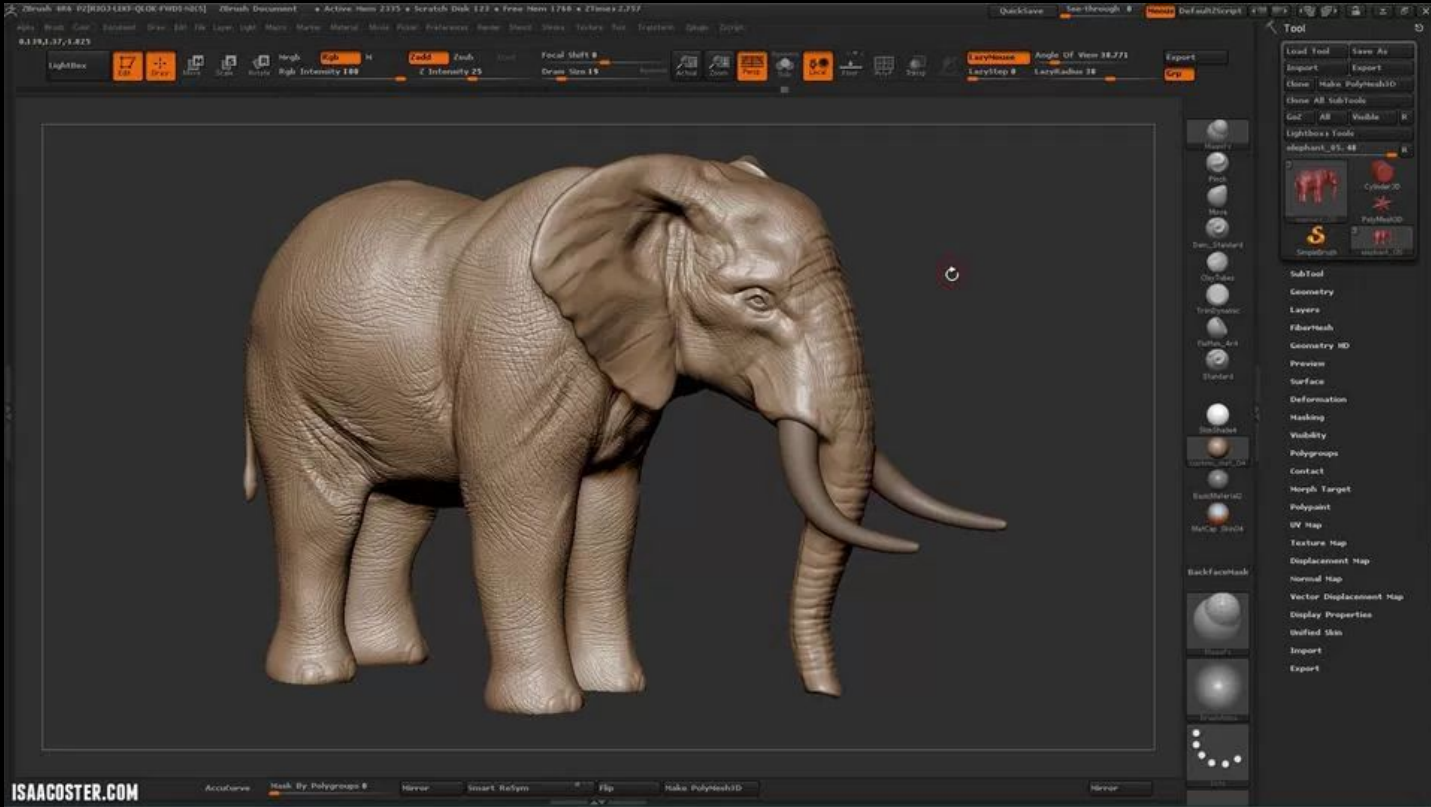
Concept/Design

Modeling

Rigging

Animation

High Res Modeling: Zbrush





Cabal Legionary
block model



Hive Ogre
grey model



Fallen Vandal
production model

(Destiny character pre-production video)



2D Concept Art

Vex Goblin



Character Development Process
BUNGIE



Realtime 3D Animation

Concept

Concept / Design Phase

- Gameplay Design
- Concept Art
- Story / Fiction

Review

- Design, 3D Art
- Animation
- Rigging

Pre-Production

Block Model Phase

- Core Proportions
- Silhouette
- Relative Scale
- Gameplay Prototype

Review

- Design, 3D Art
- Animation
- Rigging



3D Art Rigging Animation

Grey Model Phase

- Secondary Detail
- Model Topology
- Deformations
- New Rig Components
- Playtesting

Review

- Design, 3D Art
- Animation
- Rigging



Full Production

Design

- Actions
- Behaviors
- Encounters
- Variants

3D Art

- High Res
- UV Maps
- Shaders
- Variants

Rigging

- Procedurals
- Deformation
- Vert Anim.
- Dynamics

Animation

- Navigation Set
- Combat Set
- Vehicle Sets
- Weapon Sets

End of lecture 1

Let's get started!