

The logo for GDC Europe 2011. It features the text "GDC" in a large, bold, dark purple font, with a small "11" inside the "D". Below "GDC" is the word "Europe" in a similar dark purple font. The background of the slide is a complex, abstract design with overlapping circles and a grid pattern in shades of pink, red, and white.

GDC Europe

Game Developers Conference™ Europe 2011
August 15-17, 2011 | Cologne, Germany
www.GDCEurope.com

From Boxes to Life! How to Prototype and Develop Creatures: Mass Effect 2 and 3 Case Study

Scylla Costa

Development Director, BioWare/EA

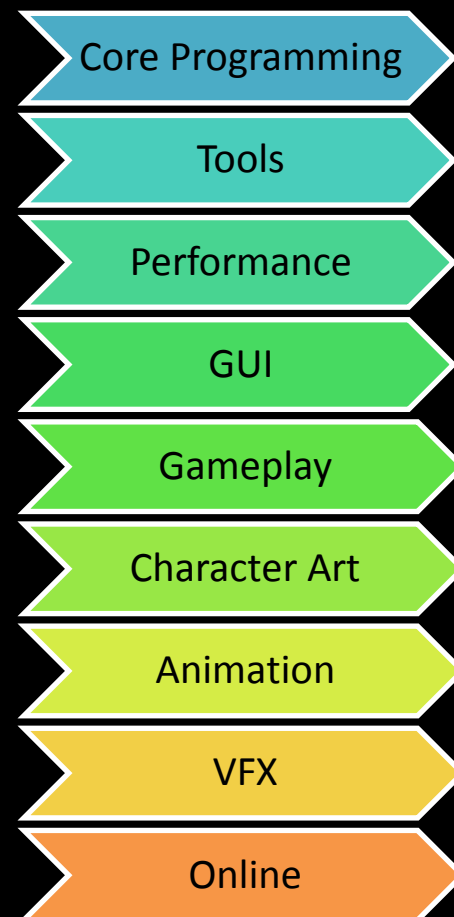
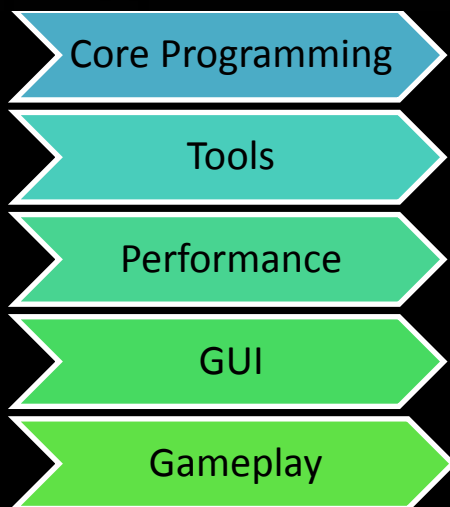
Goals for today

MASS
EFFECT **3**

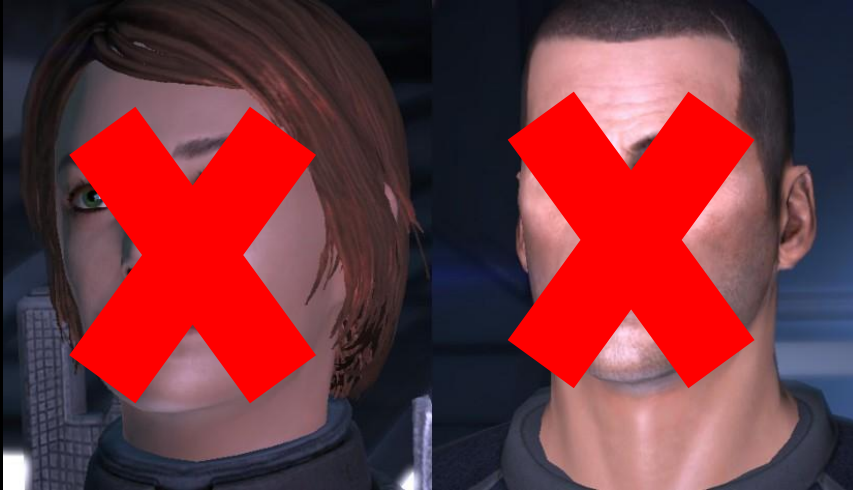
Who am I?



What do I do?



What is a creature?



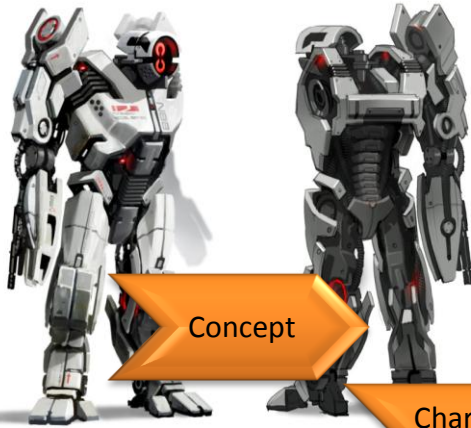
What is a creature?



What is a creature?



ME2 Process



Concept

Character
Art

Animation

Gameplay

VFX

Audio



Example



Clearly fusing Collector DNA with the combined brainpower of several human heads, the Praetorians are another example of horrific Reaper experimentation.

08 PRAETORIAN LIFE FORMS

MOOSE EFFECT 2 (PPT 5004)

21

Example



Clearly
the Pra



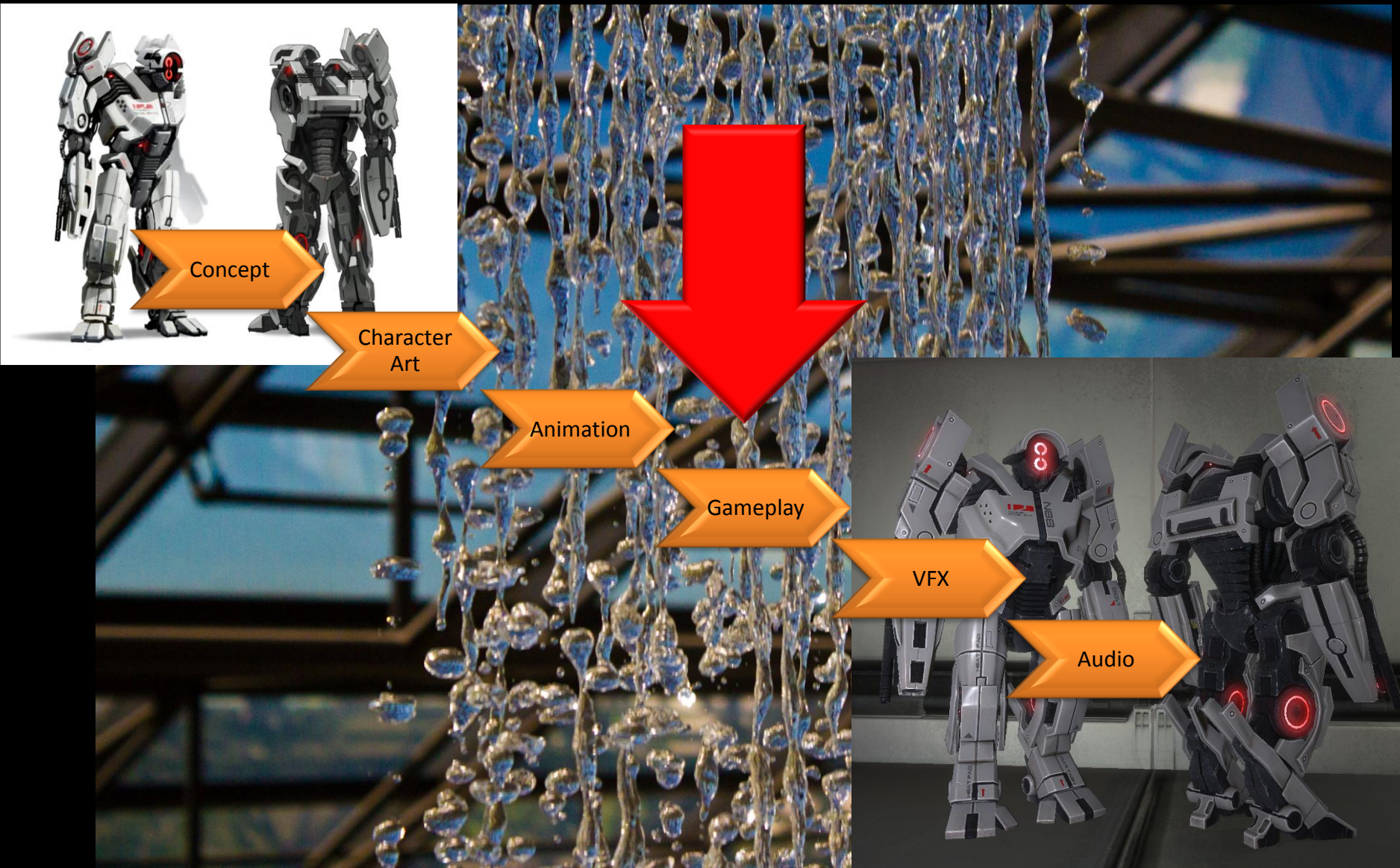
Example



Other examples



ME2 Process



Focus on the Most Important Problem



MASS EFFECT 3

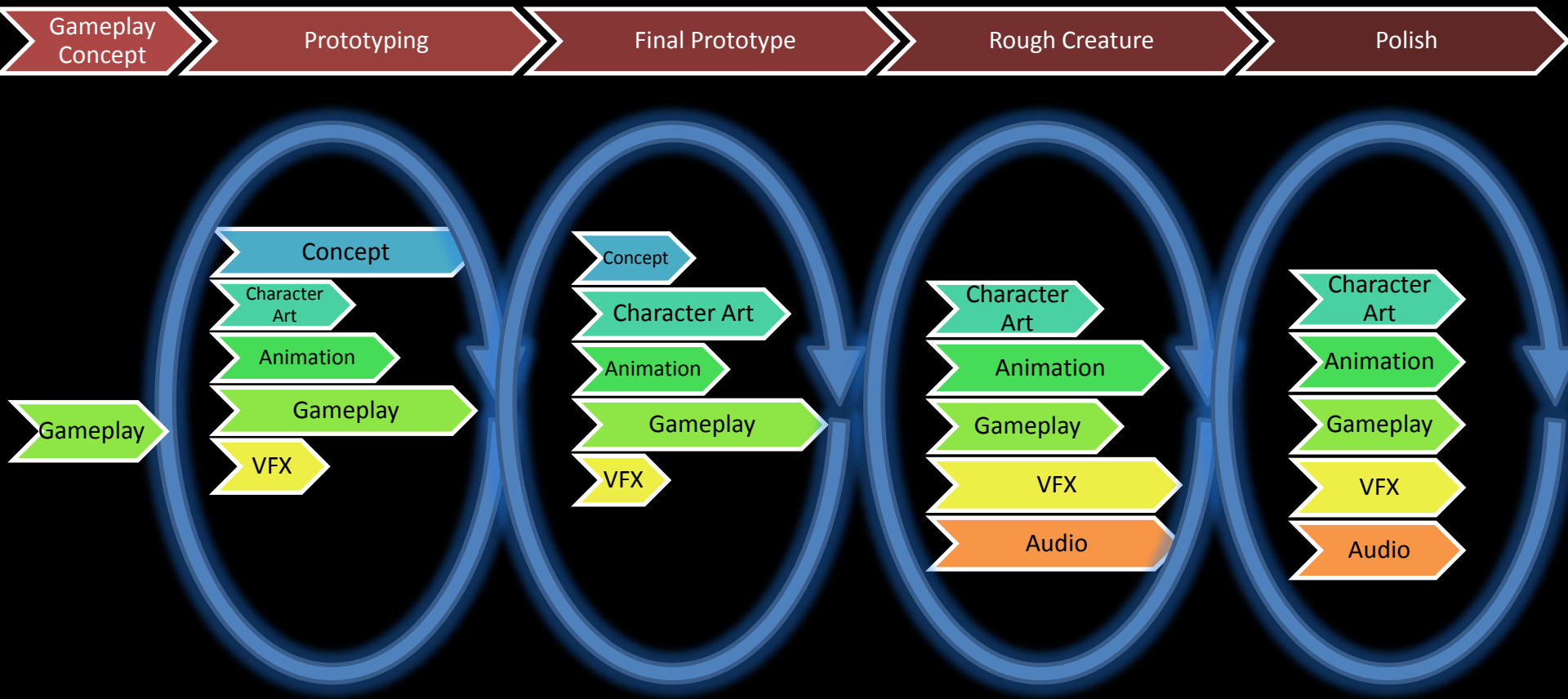






**Changes can
be scary!**

Creature Creation Process



CCP - Gameplay Concept Phase

- Factions
- Roles
- Creature Pipeline
- Creature Bible

Cerberus Faction



Reaper Faction

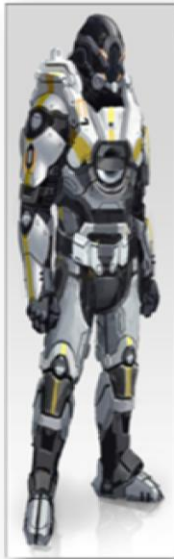





Roles

- Cover Taker
- Slow Pressure
- Support
- Suppressor
- Cover Buster



Creature Bible

	A	B	C	D	E	F
				Overview	Audio	Role
1						
2	Cerberus - (Technology Assisted Super Soldiers)					
3				<p>Assault Troopers are basic cover taking unit for the Cerberus Faction. They are normal enemies and can take a moderate amount of damage before dying, they do not have shields.</p> <p>They fight from medium range with assault rifles. They have several leans which they can use (full, partial). When under fire or if they are about to be hit by a projectile power, they can do a combat roll maneuver to evade.</p> <p>On higher difficulties, they will roll to evade more often. They will also do more damage and will have stronger self preservation instincts (hiding in cover for longer when wounded).</p> <p><u>Size:</u> Humanoid (1.85m) <u>Weapon:</u> M-8 Avenger Assault Rifle, Shock Stick (Melee) <u>Defenses:</u> None <u>Engagement Range:</u> 15-25m <u>Abilities:</u> Shoot, Take Cover, Mantle, Swat Turn, Cover Slip, Climb Up, Ladder Climb, Combat Roll, Melee Attack <u>Supported Entrances:</u> Boost Down <u>Combat Idle:</u> Squatting, playing cards</p>	<p>Assault Troopers communicate a lot about maneuvers, warning about the player flanking them. Their audio should sound like com chatter about targets, it should have hisses and pops in it (but not be unintelligible).</p>	Cover Taker (COTA)
4						
5				<p>Cerberus Centurions are advanced cover taking unit for the Cerberus Faction. They are intelligent and can take a moderate amount of shield and health damage before dying.</p> <p>They fight from medium range with advanced assault rifles, their assault rifles have underslung grenade launchers. They have several leans which they can use (full, partial). When under fire or if they are about to be hit by a projectile power, they can do a combat roll maneuver to evade. When in trouble they can also deploy smoke grenades which will obscure the player's vision and targeting abilities.</p>		

Creature Pipeline Doc

Creature Pipeline

Prototype

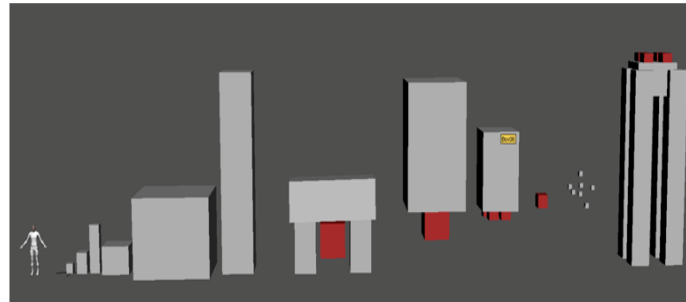
The prototyping phase is primarily to lock down the basic idea of the creature. How does it fight? How does it move? What are its attacks? Does it have any custom combat entrances? How does it respond to the player? Does it use the "Battle Damage¹" system? How does it scale with difficulty?

At the end of this phase we should be able to see a functional creature in a map that behaves in a way that is representative of the creature. It should have box art and very rough animations (1-2 frame). Movement and behaviour should be defined, rough VFX and weapons should be present. Any programming features required for the behaviors should be prototyped out (if applicable). A test level should also be created for this creature – one designed to work with its behavior. When evaluating the Prototype creature we should see how it could be fun when tuned properly (which will occur at a later phase).

Prototype creatures are not for use in production levels.

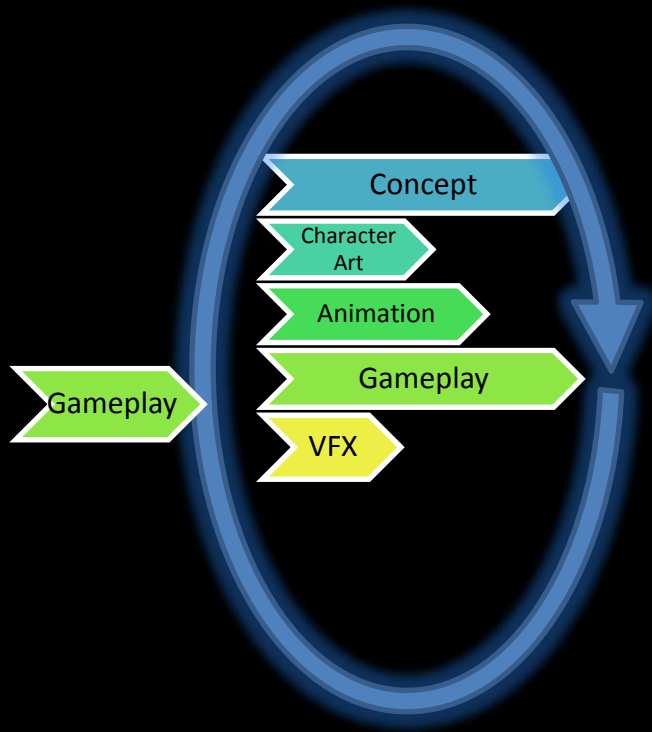
Deliverables:

- Abilities and Tactics defined
- Damage presentation determined (Battle Damage)
- Movement speed roughly determined



Example: Box art for creature prototyping

Creature Creation Process



Heavy Mech and the Atlas

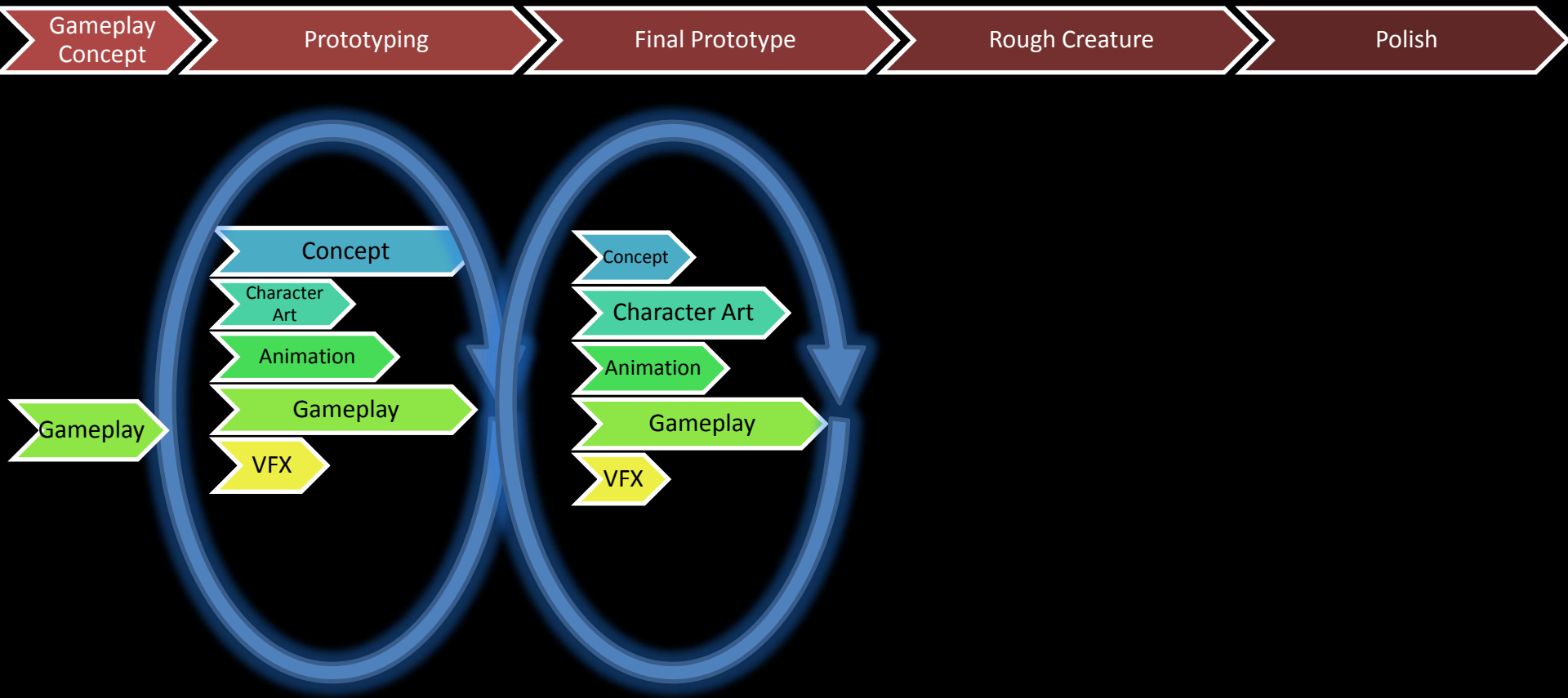




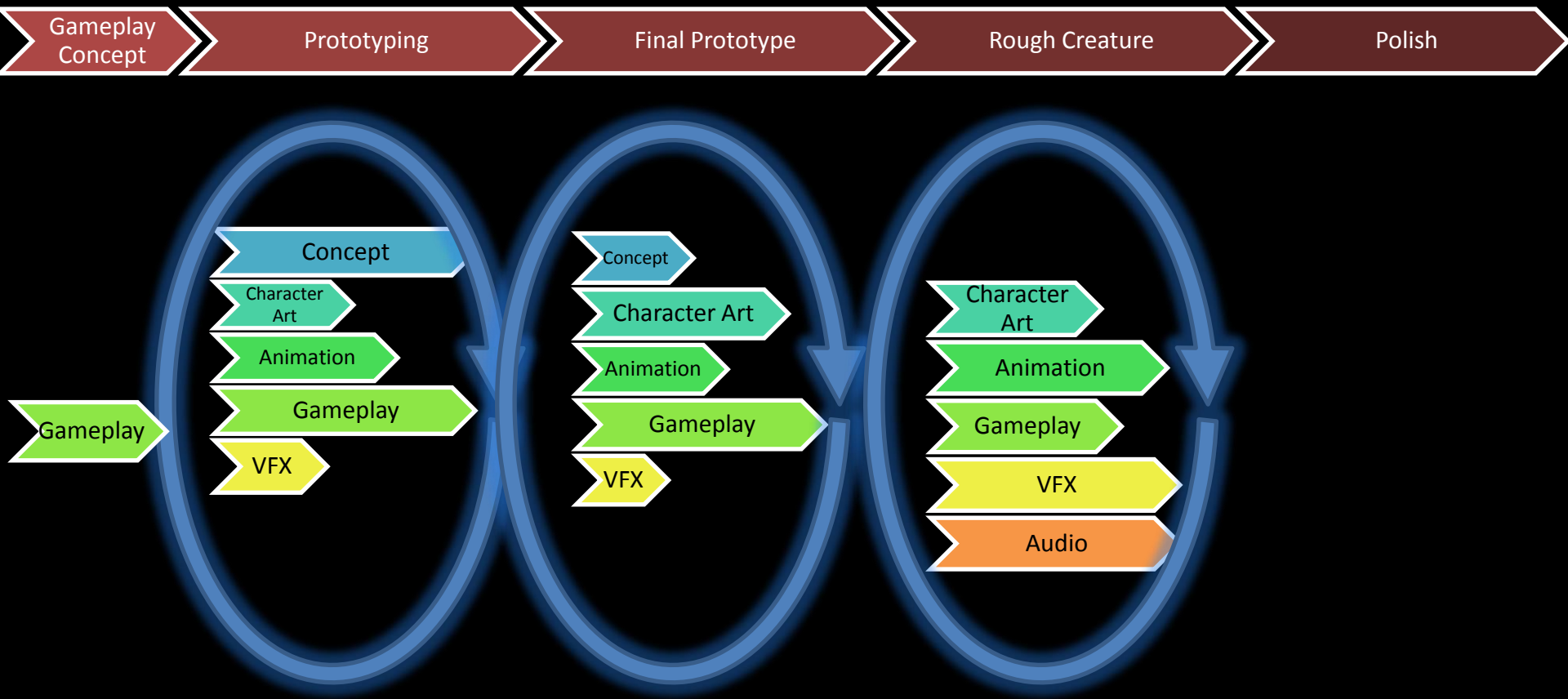
Prototyping Phase

- Box Creatures (videos)

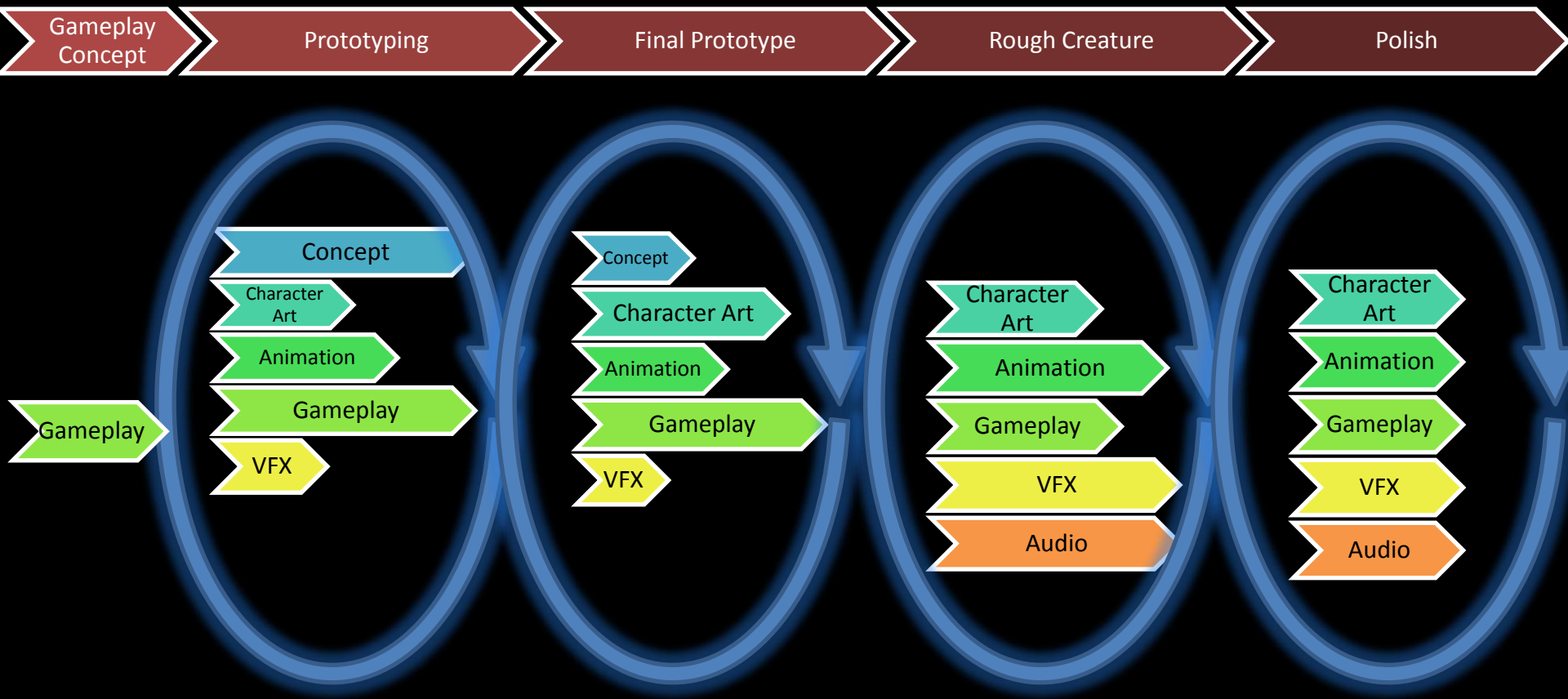
Creature Creation Process



Creature Creation Process

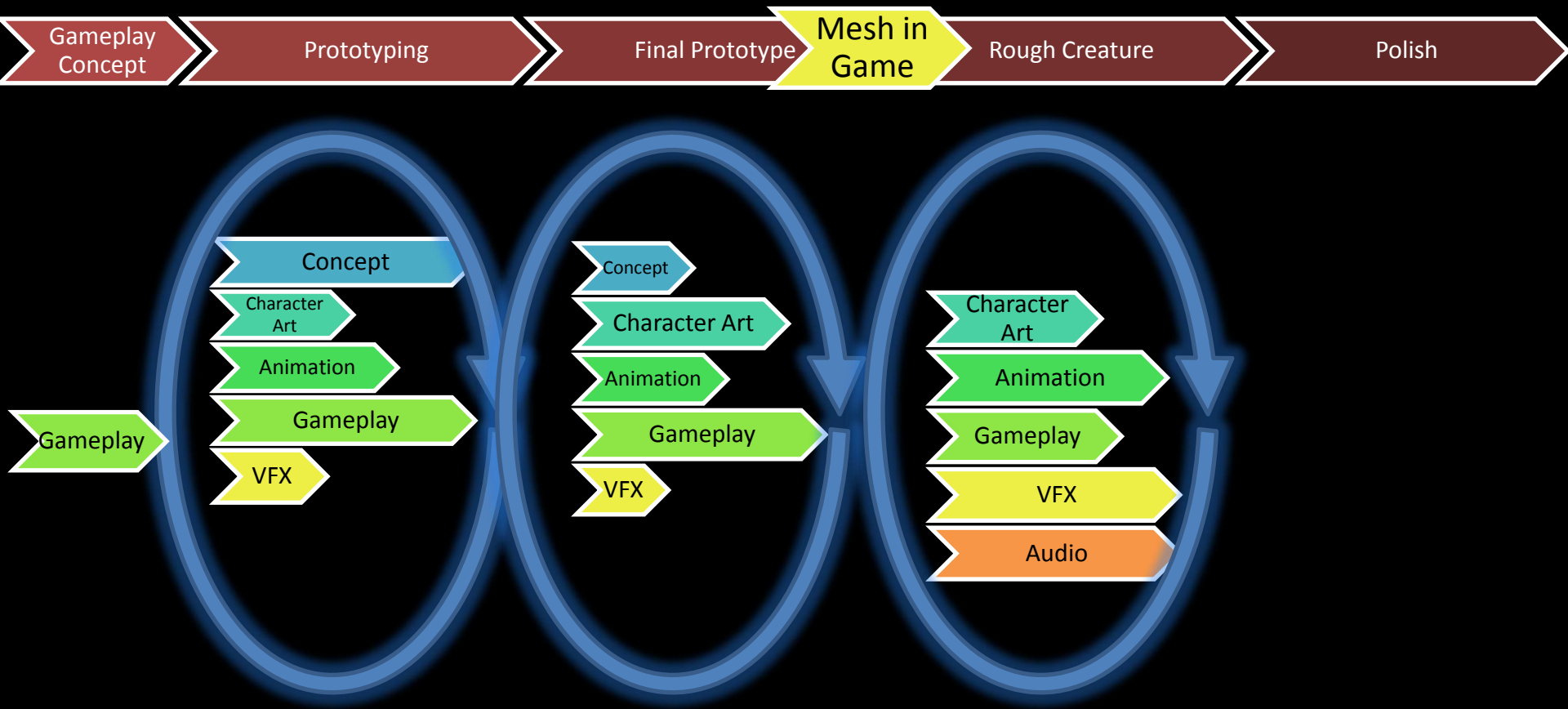


Creature Creation Process



RESULTS?

Creature Creation Process



Committed team!





**Work on
expectations**



Use cross teams



**Improve communication
and visibility!**

How are you getting there?



Questions?

Big thanks to the entire Gameplay, Character Art, Animation, VFX, Audio and QA team. You guys rock!

Special Thanks to Brenon, Boldwin, Noel and Preston.

scylla@bioware.com

[@scyllacosta](#)

