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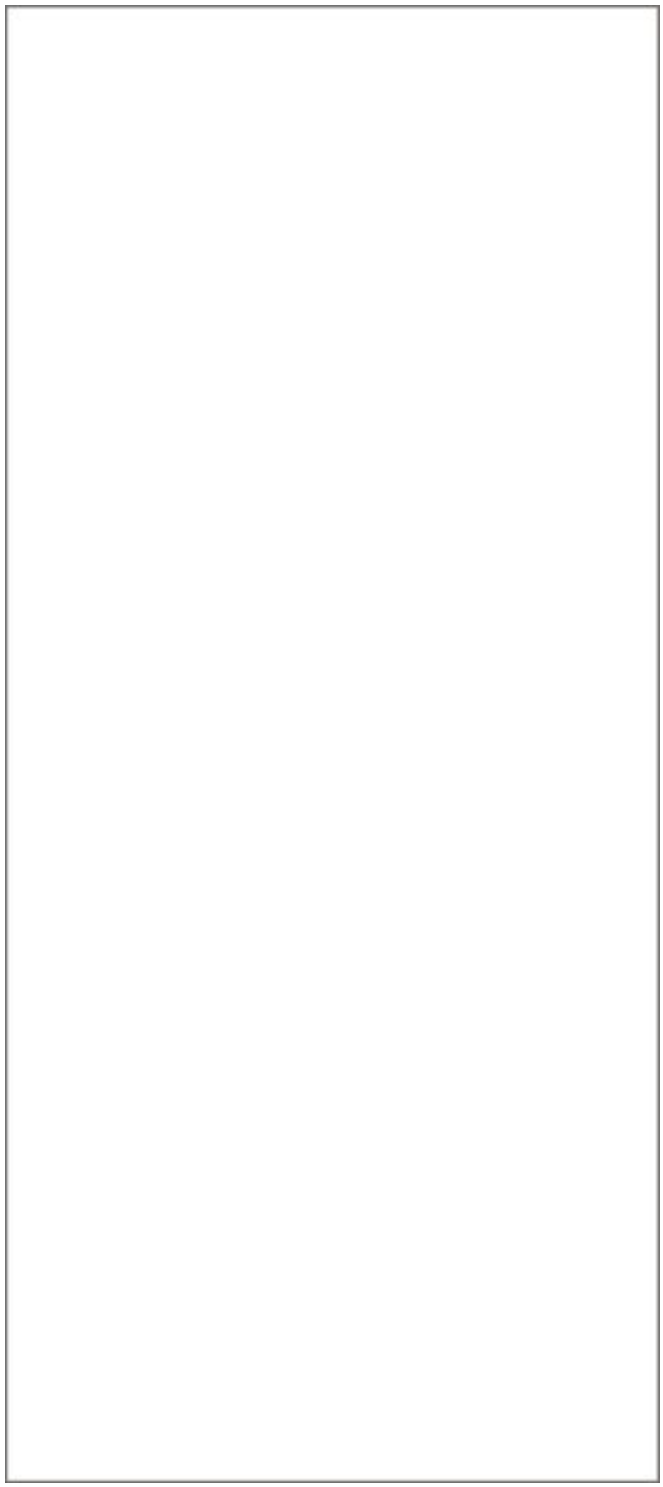

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Game Design Document

Project Auld

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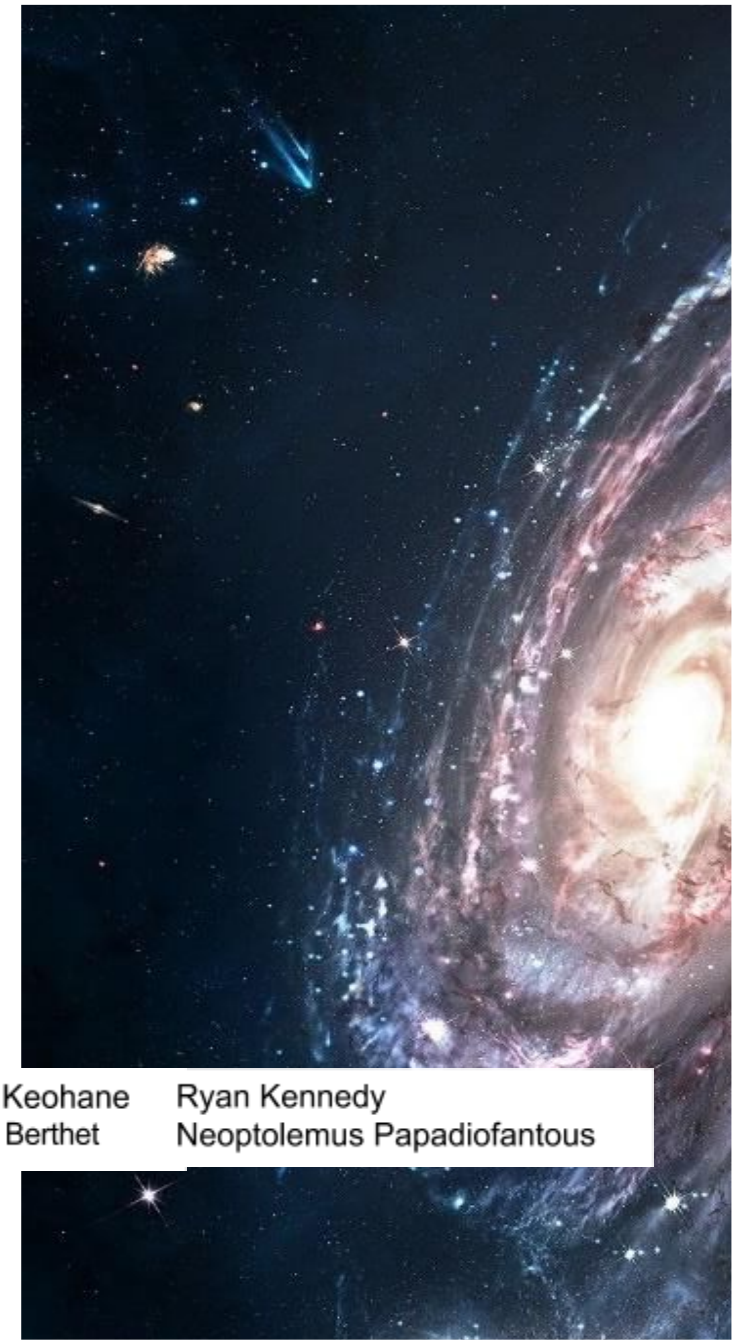

Proposed Plan

Alliance of the Auld: meet the team

Alliance of the Auld is the name given to our team that is composed of 2 French students and one Scottish student within the Development Team. We all have different backgrounds and that makes us more interesting since we have 3 different points of view.

- The team Leader is James Keohane, he is a French student that studied 2 years of web development. In the AoA team (Alliance of the Auld) he acts like the Project Manager and the Lead Designer.
- The Lead Dev is Ryan Kennedy, he is a Scottish student that did 2 years of Game Development at the College of the West of Scotland and then moved onto his 2nd year at UWS. In the AoA team he is our coding referee on the Unreal Engine because of his knowledge and experience. Ryan will be the one working on the Technical Design of the project Auld.
- The Level Designer is Vincent Berthet, he is a French student that studied 2 years of electrical engineering and industrial computing in AoA team he manages the blog, find assets, pictures and material that will be used in the game.
- Neoptolemos “Thomas” Papadiofantous has re-joined our team two weeks after the development started. He will work has a game developer on Unreal Engine with Ryan. Thomas did 2 years of Computer Game Development in UWS. So he will mostly work on Unreal blueprints and GUI.

Game Overview

The concept idea came from a mixed of Stellaris and a modded map from Warcraft 3 called missile war.

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The team wanted to make a game that focuses on planets, shooting missiles, and controlling resources. Stellaris is a 4X game that focus more on tactical choices, strategies and politics than big battles whereas missile war is only building stuff to make your shield stronger or organize your weaponry to shoot more missiles. So the Project Auld was born.

The player is the Grand Leader of a nation that live not that peacefully in a solar system where there is another player that have his nation settled in a neighbouring planet. The two players will have to make their nations expand and evolve through various development branch to pressure their opponent into submission or annihilation.

This game is mainly resource management and tactical choices. The main planet is protected by a shield that prevents the opponent weaponry from harming the population. This population will have to produce energy and tech points in order to make weapons powerful enough to overcome the opponent shielding.

The resources are scattered through the entire map on moons and asteroids and can be salvage by workers, space stations or settlements. These resources will aid the player into developing its technology faster, expanding further and building more powerful weapons.

An army can also be built to attack everything that stands in the outer space. Their main purpose is to take control the opponent settlements, destroy and scavenge the workers and space stations.

Religion is another way to turn the tide of battle by praying that something strange will happen in space …

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Intended development environment

Unreal Engine is the game engine that will be used to develop our 3D management game. The main reasons we use Unreal is Ryan has experience in it, the blueprint system is very convenient since there is a lot of interaction between elements in our game and we don't have to pay anything.

Github and Gitkraken is our source control server and client since GitKraken is a very powerful tool and has a very aesthetic design. Using GitKraken allows us to work on the same code but coding different features at the same time.

Risk Analysis

The risk analysis table uses a score with estimated probability and estimated impact on the project development. The range of estimation is between 1 to 5 where one is very low and 5 is very high.

Those risk are problems that can actually happen and it will slow the development process. So it's something that we have to take in account in order to make the game.

Team Member absence	EP = 2 EI = 4	Sometimes people get ill so when illness arrives the work cannot be done properly. Working is also time consuming.	Task that haven't been should be given to someone that can manage them and wait until the team member is healed in order to give him another task.
Equipment Failure	EP = 2 EI = 5	The personal computer can crash or something can go wrong with the software.	A task that can be accomplished with a UWS computer will be given.
Incomplete Task	EP = 4 EI = 3	A task can be unfinished, not well done or too hard. It will make the development process longer.	If a task is incomplete 2 team members work on it to finish it correctly.
Unreal Engine learning	EP = 3 EI = 5	In order to make the proof of concept, team members should learn some basics from the unreal engine in order to code.	Books from the library are good ways to learn Unreal Engine 4.
Source Control fail	EP = 2 EI = 4	GitKraken is a bit hard to understand for the first time using it. So sometimes the code isn't correctly shared	Help the team member struggling with GitKraken by sharing screen on skype or assisting him by

		between team members.	whatever ways possible.

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Project Management

To manage the development flow of the project, some tools are used to make our working time more efficient and work on an agile based method.

When we aren't working at the University, the team can use Slack for several purposes. It is a very handy communication tool that we use to state our work, for example, when a task is finished the team member write that it's done on Slack and the Project Manager modify the task on Trello.

The team uses Trello to make smaller division of the overall work and keep in mind that there is still work to complete or to notice other team members that they have completed their work and what they are working on next.

Google drive is the team storage tool. We share our work on google drive so it can be revised by other team members and write on it some feedback when all team members are working at home.

Meetings is the most important part of the development process. It's where all team members review the work that have been done et make task for the next meeting like in agile method.

Game Design

Meta-Game overview

Players

Two player will compete against each other until one overcome the other.

Objective

The main goal of the game is to wipe the enemy main planet with your own weaponry.

Rules

The player will not be able to move his planet, moons or asteroids. He won't be able to harvest a moon where there is an opponent moon station or settlement.

Conflict

The Conflict is resolved by shooting missiles to the opponent planet, taking down his shield and bringing his planet life to 0.

The shielding is how the player defend himself and gathering resources will help him develop his planet technology and weaponry.

Game Visibility

The two players can see the entire map without any fog of war but the gatherable resources, resources held by the opponent, weaponry, shield power, planet life, tech level of the opponent and faith points cannot be seen without the proper upgrades from the Defence development branch.

Outcome

The game end when:

- One of the player destroys his opponent planet with weaponry.
- Use of the tier 5 Power of Faith will grant a huge power to the player that will usually bring the opponent down.

Resources

- Planet Life
- Shield
- Material
- Energy / max energy
- Tech points
- Faith
- Missiles
- Missiles Pool

The Main Planet

The Main planet is the core feature of the game. It has a life bar and it cripples the economy of the player if it's damaged by the opponent. The main planet of the player will start with a base of 200 max hit points plus nation stats modifiers at the beginning of the game.

For example: base life points + Jellygod Nation = 200 + (-100) = 100 final hit points

Current life	Max energy loss	Material income reduced
90%-80%	5%	5%
79%-60%	15%	15%
59%-40%	25%	25%
39%-0%	30%	30%

The player has several actions on the main planet to interact with like: building worker, building weaponry, upgrade shields, develop technology, repair planet, regenerate shields, use Faith.

Nations

The nations are the representation of the player in the game. Each nation has their own specifics, development tree, weaponry, shield, Power of Faith and starting stats modifiers.

Playing a nation brings pros and cons to the main planet that will apply in the beginning of the game. It will also bring a different gameplay from every different nation.

See Nation Template for more details.

The Swarm nation is a bug nation that has strength in numbers. It is able to create a lot of missiles and send swarm of projectiles to hinder the shield and hope that one or two will leak to damage the opponent's main planet.

The Azerk nation is populated by Shamanic Trolls that believes in Elemental balance and the void is the enemy of all order. They have strong offensive abilities in their cripplers and power of faith that enhance their attacks. Their gameplay is that they have to prepare a well-planned attack in order to make their move efficient.

The True Cyclop nation is a George Orwell's 1964 nation with Cyborg Cyclops as inhabitants. They have the unique ability to see opponent stats, missiles and other intel that can gives them the advantage throughout the game. This nation has the most powerful projectiles that are expensive but very strong against both shield and planet.

The Jellygod nation is a strong energy user that has powerful shield to protect a weak planet and strong shield destroyers to weaken the opponent shield and make their energy consumption higher. They can steal energy from their opponents to allow their projectile to pass through a weaken shield.

Repairing the main planet

The player will be able to repair his planet with the Repair Button on his main interface for a cost. The base cost of repairing the main planet is 5 materials for 1 hit point.

Command centre

The player will be able to control everything through the command centre. The command centre is the Graphical User Interface (GUI) in the game, clicking on a game object will offer him actions to take through the command centre.

Resource Management

There are 4 resources within the game to control the flow of the game: Energy, Material, Tech points, Population. These resources help the player to perform some game action like developing new technology, repairing shield more efficiently and build more weapons at the same time.

Energy and Energy Pool

The energy will be used for the upkeep of the structures. It's gained by advancing in technology, upgrades or controlling resources on moons.

The energy cannot be stocked, it will work like an energy pool, if buildings or weapons have an upkeep, then there will be less energy to use.

Examples:

- Having a big pile of missile will demand the player to use energy to keep them.
- Repairing the shield is another use of the energy.

The base starting Energy Pool is 50 max energy plus nation stats modifier but the Energy Pool is capped at 500 max energy for every nation.

Material

Material are used for upgrades, weaponry, planet repair. It's gained by advancing in technology, upgrades or controlling resources on moons.

Material can be stocked without any limit.

Tech points

Tech points allow the player to advance through different development branches like:

- Economics
- Defences
- Science
- Weaponry
- Religion

The player has 3 ways of gaining tech points:

- The Main Planet and the Settlements produce tech points periodically.
- Some space resources can also bring Tech points if they are gathered by the player.
- Attacking the opponent with his own weaponry bring tech points per missile.

Population

Will not be implemented in prototype

The player will be able to control his population and choose their fate. The player can allocate a number of the inhabitants to go into Economics, Defences, Science, Weaponry, Religion to add various bonuses.

Usually Economics boost the growth of resources, Defences will give the player a stronger shield, having scientists for the Science branch will help to produce more tech points, more inhabitants in Weaponry will enable the player to build more missiles at the same time and more followers in the Religion branch will produce more faith points.

If the player doesn't allocate inhabitants in a specific task, they will just work on reproduction. How fun.

Weaponry

Build weapons

The only way to build weapons is using the main planet to produce them with the material resource.

Multiple missile can be built at the same time if there are enough population working into weaponry.

There is a max limit to missiles that can be built on the main planet. This max limit can be pushed through developing Weaponry branch.

Upkeep

The weapons have a slight cost in energy if they aren't fired

Attack

The player will be able to choose how he wants to fire his weaponry:

- All in: an attack that will throw every missile that have been built straight into the face or your opponent.
- Launch per type: The missiles that have the same type will be launched at the same time
- Launch one missile: The player can choose to shoot one missile.
- Automatic fire: The player can choose to automatically shoot missiles to the opponent when they are created.

Missile Types

There are 3 main missiles type that have common attributes.

Projectiles

The Projectiles are able to damage shield or planet on impact. They have a small chance to leak through the shields.

Projectiles are built on the main planet and can be stocked by the player however the storage of many missiles is energy consuming.

Can only target the main planet.

Shield Destroyers

The shield destroyers (Ex: Lasers) are built on the main planet with material and they attack every period of time.

Activating shield destroyers cost Energy upkeep but they don't stop shooting. It's possible to deactivate the shield destroyer to stop paying any Energy upkeep.

Shield destroyers have a bonus damage on shield but they make less damage on planets and they have no leak bonuses.

Can only target the main planet.

Cripplers

Cripplers are special missile with secondary effects. They are expensive to build but bring to the game more tactics.

Usually they don't do damage and they can bypass shields or target moons

Shield

The shield is the main protection of the planet, easy to repair and very strong against incoming missiles.

For example: Using a Holly Jelly Smite with a 5% leak on a shield with 67% shield points left will have a final leak probability of (5 + 9) 14%

Current shield	Leak possibility
100%-90%	1%
89%-70%	3%
69%-50%	9%
49%-30%	15%
29%-0%	30%

The shield will have a base of 100 shield points plus nation stats modifiers that will automatically regeneration over time or the player will be able to choose the amount of energy to use into the shield restauration.

Base Regeneration	Energy cost
1	0
5	5
10	11
15	17
30	32
60	66
120	134
240	270

Upgrading the Shields

In order to have a stronger shield, the player will have to upgrade with materials or advancing his development with tech points.

Upgrading the shield can prevent the leak of projectiles and bring more shield regen to prevent the shield destroyers to tear down the shield.

Upkeep

To repair the shield, the player will have to reduce his energy to have a better shield regeneration. The higher is the energy input, the higher will be the regeneration.

Secondary effects

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Moons and asteroid fields

Harvesting moons and asteroids will give the player resource income. Energy will have a greater Energy Pool, Material gives the player higher material income and tech points will be obtained faster.

Gatherers will be used to harvest this resources in order to obtained the bonuses that gives the moon or asteroids.

Gatherers

Workers

The workers are the first gatherers that the player will be able to afford. Their main purpose is to go to the moon and bring back the resources gathered on the moon to the main planet.

Pros:

- Cheap and easy to build
- Can scavenging asteroids (they are the only one)

Cons:

- Take time to bring the resources gathered
- They don't produce Energy
- Can be attacked while moving (*if playing with army*)
- Can be intercepted and scavenged (*if playing with army*)

Moon Station

The moon station is an advanced worker that can gather resources only on moons and that teleport it directly to the main planet.

Pros:

- Gather faster than Settlements and Workers
- Teleport resources to the main planet
- Produce Energy
- Higher material income in the game

Cons:

- Cannot move
- Can be captured (*if playing with army*)
- Take time to build

Settlement

The Settlement is an expansion of the main planet, it can gather resources and send it to the main planet or use it to develop itself and help the research of weaponry and shielding. The level technology is the same as the main planet and the other settlements.

If the settlement is being attacked, it will be partially destroyed and the player that capture it can choose between scavenging the settlement or rebuild it for himself with a lower price.

Pros:

- Can produce technology points
- Workers can bring resources to the settlement instead of the main planet
- Can produce Energy and Material
- Can produce army (*if playing with army*)

Cons:

- Expensive to build
- Can be seized (*if playing with army*)

Development Tree

The Development Tree can be accessed by the player with the Development Tree button interface. It will open a screen with new 5 different trees and enable the player to purchase technology with tech points.

Economics

The Economic development branch will mainly upgrade the resource gathering, Energy consumption, worker production, and planet reparation.

Investing tech points in this branch will help the player to play with more resources so he can make more missiles, produce more workers, or buy shield upgrades before his opponent.

Defence

The Defence development branch upgrades brings to the player a stronger shield, a better shield regeneration, possibilities to gain vision on the enemy resources or actions.

Intelligence: The player, by investing points in the defence branch, can gain the possibility to see what the opponent is doing, what kind of resources he actually has, his level of tech and so on.

Shielding: Shield upgrades boost the shield points pool, shield regeneration, energy consumption, leak protection and add secondary effects depending on the nation.

Science

Developing science will upgrade the gathering of tech points from various sources, add secondary effects to weapons, unlock new gatherers.

Weaponry

The Weaponry branch enables the player to have more weapons at his disposal, strengthen his offensive power, upgrade damages done by the missiles, reduces weapon consumption.

Religion

Upgrading Religion will augment the growth of Faith and unlock stronger powers.

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Power of Faith

The power of Faith is what helps a player to punctually make an action in the game usually in his favour by calling the favour of his god or whatever entity he praises.

The player will have 5 different faith abilities to use throughout the game. The abilities depend on the nation chosen.

To trigger a Power of Faith, the player will have to gather enough Faith Point and obtain the corresponding spell through the religion development branch.

Faith points are capped at 1000 and there are obtain only with time and development branch Religion can increase the gathering of Faith points.

Cost	Tier	Intended Mechanic
50	1	Small nation power
200	2	Boost economy
350	3	Shield Last Hope
500	4	Strong nation power
1000	5	End game power

		Power of Faith for each nation			
Tier	Details	Azerk Tribe	JellyFish Empire	True Cyclops	Swarm
1	Small Nation Power	**Balanced Economy :** Reduce the economy of both players of a x% (up to 75%) during 1 min	**Overcharge :** increase by 25% your energy production during 3 mins	**Natural Strengh :** Increase by 15% the damag inflicted to your opponent	**Parariste :** Reduce the oppo economy by 25% during 1
2	Economy Boost	**For the tribe :** Improve the natural workforce of the tribe (+100%) during 1 min but at the end of the effect people will die (reduce your income by 25% during 1 min)	**Slavery :** Humans are gathering 33% more resources during 3 mins	**Serve Daddy :** Requisition all cyclopes to provide 50% more income during 1 min	**Hardworker :** Increase by 50 income during 3 mins
3	Shield Last Hope	**Pray for Ildalary :** Improve the value of your shield by x% (up to 100) of the current shield during 1 min, at the end of the effect the previous shield is restored but the income is reduced to x% during 1 min	**Energy shield :** Use an x% (up to 100) of your energy production to reduce the damage received by your shield (x%/2) during 1 min	**Baseballer Nation :** Cyclops use their bare knuckles to avoid 25% of the projectiles incoming during 2 mins	**Shield Maintenance :** Increa shield value by 50% of the ma and avoid leak on the shield min
4	Strong Nation Power	**Blood must have blood :** Sacrifice an x% (up to 100) amount of the tribe workforce (reduce the income) during 1 min in order to enhanced by x% the damage inflicted OR to reduce the damage received (x%/2)	**Joule effect :** Reduce your opponent energy production by the % difference between him and your energy production	**Way of Development :** Increase by 25% your energy, income,damage during 2 mins	**Born to gather :** Increase by income during 1 min, but di weaponery
5	End Game Power	**Fair Fight :** Fix the shield of both players at x% (0-100) of his max based life during 1 min. At the end of the effect the shield is restored to his previous value and both planet are healed of the amount of damage	**Submission to the Empire :** Damage the enemy shield of 1.5% of his max life each seconds during 1 min, if it hurts the planet damage are increase to 3%	**Big Dady Roar :** the roar increase the damage inflicted by your Nation to 130%, however your planet receive 50% more damage during 1 min	**Queen wish :** All servitors of the swarm are doing the best for the Queen. It's increase by 50% the income, energy,damage during 3 mins

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Technical Design

Game development process

The Project Auld is an ambitious game developed by a small student team. The game will be coded mostly with the Unreal Engine 4's blueprints system and many placeholders in the first place. Ryan as our lead developer will divide the work into smaller task for each group members.

The labour can be divided in several smaller task as the team is going to focus on the level design, main planet interactions, game resources, win loose conditions, nations implementations, weaponry and shield, tech tree, power of Faith and Multiplayer.

Game Platform

Our game will be primarily designed for Windows PC. The reasoning behind our choice of Windows PC is fairly simple we favour the platform for its powerful hardware which will allow our game to run smoothly and the fact that our game will be designed to work with Mouse & Keyboard. Local multiplayer exists only on computer.

Hardware and Software

Software:

Unreal Engine 4 is a 3D software using C++ as the programmable language. One of Unreal Engine 4's strength is the blueprint system that will help greatly the development since the game has a lot of mechanics that will interact all together.

Working within a 3D environment will also be easier with the Unreal Engine 4 viewport…

Sound design and software:

For our Sound development we will be using Audacity to produce any sound effects that might be needed, for example a menu sound which will let the player know when they have selected an action also weaponry, shield, player interactions and many more will have sound effects.

The game will have a background track which we will either source freely online or find a musician to help us create one specifically for our game. The background track will be ambient to create a better gaming experience in a space environment.

Recommended Hardware Requirements for Developing:

- Desktop PC or Mac
- Windows 7 64-bit or Mac OS X 10.9.2 or later
- Quad-core Intel or AMD processor, 2.5 GHz or faster
- NVIDIA GeForce 470 GTX or AMD Radeon 6870 HD series card or higher

- 8 GB RAM

Minimum Requirements for Playing:

- Windows ® XP/Windows Vista® (latest service pack)
- Intel® Core™ i2 Duo or AMD Athlon™ 64x2 5600+
- NVIDIA® GeForce® 7600 GT or ATI™ Radeon™ HD 2600 XT or Intel® HD Graphics 3000 or better
- 2 GB RAM
- 5 GB available HD space
- DVD-ROM drive
- 1024X768 minimum display resolution

Mechanics and Gameplay

Level design

The level design is all about what the main scene will look like and how convenient it is to play within this game environment.

The Project Auld is a space game so the background will look like the Milky Way and some asteroids will be scattered around the game scene. But since these asteroids will be used to gatherer resources, they have to be placed with some thinking behind.

The main theme of the game music must sound like a thrilling space battle since the game concept is all about shooting missiles to the opponent.

Commander Centre GUI

The player will be able to perform action in the game by interacting with a Graphical User Interface called the Command Centre. The Command Centre displays buttons enabling game actions, game resources and the Main Planet status.

Those buttons will only appear when the player will click a specific game object like an asteroid or the Main Planet therefore specific buttons will appear with specific actions linked to the game object. For example, choosing an asteroid enables the player to send gatherers to upgrade his income whereas choosing the Main Planet will offer the player a larger range of choices like sending missiles or upgrading shield.

The player would like to have the game resources displayed so he can know what actions he can take at any moment of the game. There is a reasonable number of resources in the game but all have different purposes that can change the gameplay and the outcome of the game.

The Main Planet is the game object that the player has to protect at all cost. Having a special display of the Main Planet status is likely primordial. Displaying Life hit points, Shield hit points, Shield regen and Firepower are what will help the player to react to any incoming threat.

The Command Centre graphics must take in account all 3 elements to offer the player enough comfort to play the game.

Game resources

The resources of the game interact with a lot of game objects. There is Energy, Max Energy, Material, Material Income, Tech Points, Power of Faith, Faith Growth.

To gather these resources, the player must select an asteroid or moon and send a gatherer, moon station or settlement. These options will be available in the command centre (GUI) when the player choose whatever moon or asteroid he selected.

Main Planet, Weaponry and Shield

The main planet is where the player can take the most actions within the game.

On his command centre, the player will be able to shoot missiles, upgrade shield or enhance shield.

The player will be able to choose how he wants to fire his weaponry:

- All in: an attack that will throw every missile that have been built straight into the face or your opponent.
- Launch per type: The missiles that have the same type will be launched at the same time
- Launch one missile: The player can choose to shoot one missile.
- Automatic fire: The player can choose to automatically shoot missiles to the opponent when they are created.

The shield will have an upgrade action and an enhance action (See game data for upgrades and game design shield for enhancement).

Win loose conditions

The main goal of the game is to destroy the opponent's main planet.

The loose condition is set and attained when the player's Main Planet hit points reaches 0 and only the missiles are able to harm the Main Planet and hinder the Shields.

The win condition is when the opponent's Main Planet hit points reaches 0.

Multiplayer and lobby screen

The game is mainly a versus game where the player will be able to challenge another opponent. After choosing Start on the menu, the player will be in a lobby waiting for his opponent to connect.

In the Lobby the player will be able to choose a name, a nation and a colour that will define his nation throughout the game.

He will also be able to quit the lobby and go back to start screen.

Nations implementations

The player will be able to choose from a nation from 4 other nations in the lobby before the game starts.

Then the player gets to play this nation in the game with all the specifics (See Game Data).

Tech Tree

The Tech Tree will be accessed by clicking on the Tech Tree button on the Command Centre.

It will open another screen with 5 different branches from a single tech tree that is unique to each nation.

When the player has enough Tech points, he will be able to choose a new technology that will grant him a bonus in the game.

Power of Faith

The power of Faith are special actions that the player can perform punctually on the game.

It will use the power of faith resource and create a special event that will modify some aspect of the game.

Development Environment

During the Development of our project we will be using Unreal Engine 4 to implement our Games Design, we have chosen Unreal Engine for its powerful and convenient tools bringing more efficiency to the development process.

Ryan and Thomas both have experience with the Unreal Engine and we will use the blueprint system and C++ programming language due to the ease of its simplicity. Unreal Engine has a free licence with many functionalities and nice features that we can use which will save us money in licences as our funds are limited and tight.

We're going to use GitKraken and GitHub which is a free source control tool allowing use to code on the same project without conflicting with each other's work. GitKraken is aesthetically pleasing and this makes the software much easier to use the UI that is very tidy and simple.

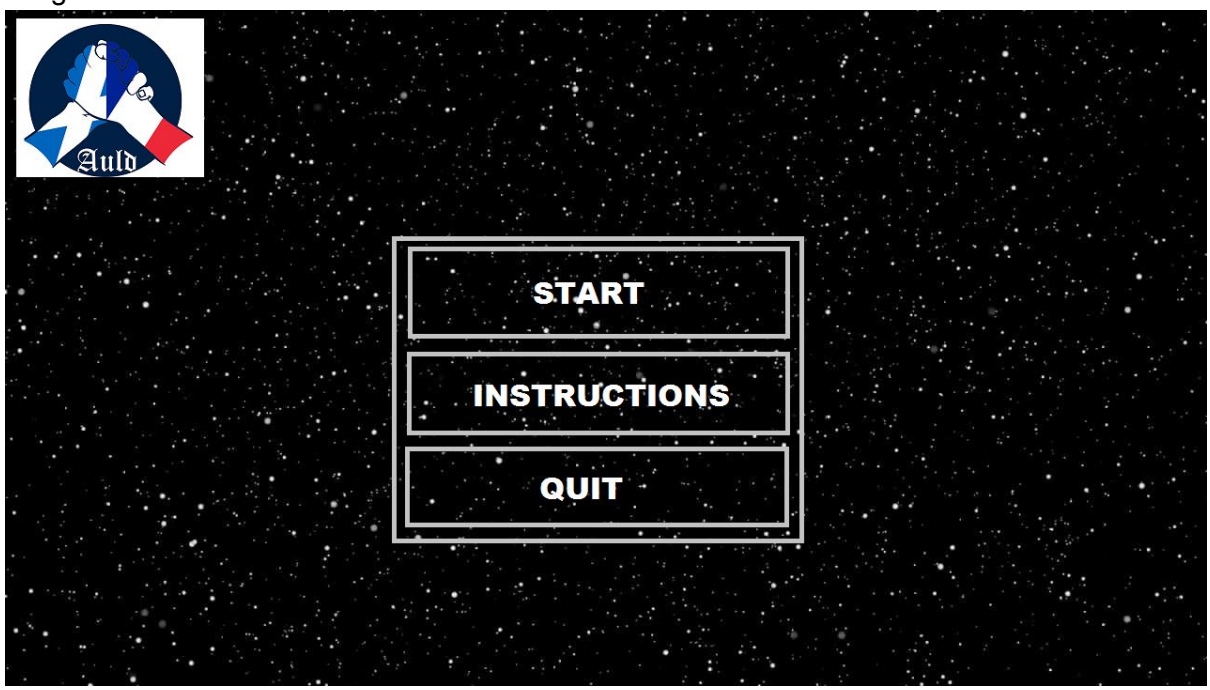
During our project we will also be documenting along the way this includes a Proposed Plan, a Games Design Document and a Technical Design Document which will be created using Microsoft Word due to all of us having years of experience with the software and the fact that it's free for students.

User Interface

The Concept for our User Interface is quite simple and easy to use which will allow our game to be played by a larger player base in terms of age.

Menu concept

The Menu will have 3 buttons, one to allow the player to begin the game, one to open up the instruction screen for new players and one last button which will allow the player to quit out of the game.



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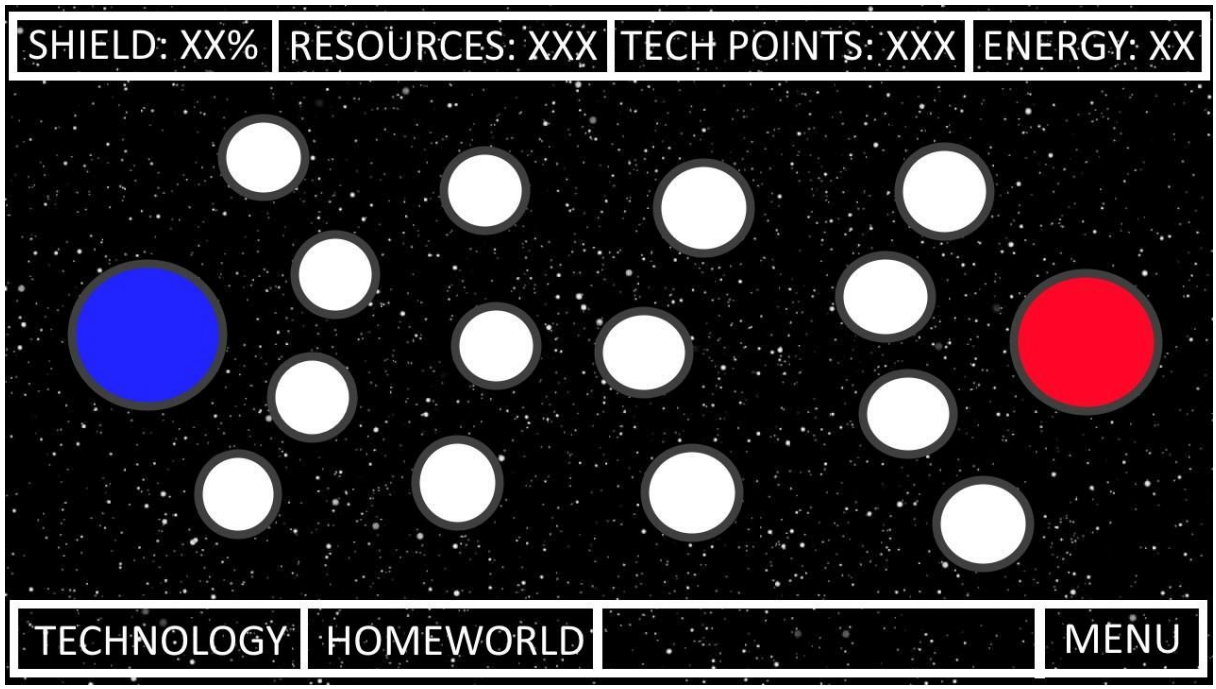
Command Centre concept

This is the general overview of the game this will allow the player to interact with each planet, moon and/or asteroid. The player will also have a clear view of his shield hit points, resource, tech point and energy pool allowing them to have a large amount of information on one screen. There will also be 3 buttons which will appear at the bottom of your screen, one being the button to allow you to access the Technology Tree. Another will allow you to access your main planet menu giving you some extra information as well as any special abilities your race/nation will have access to.



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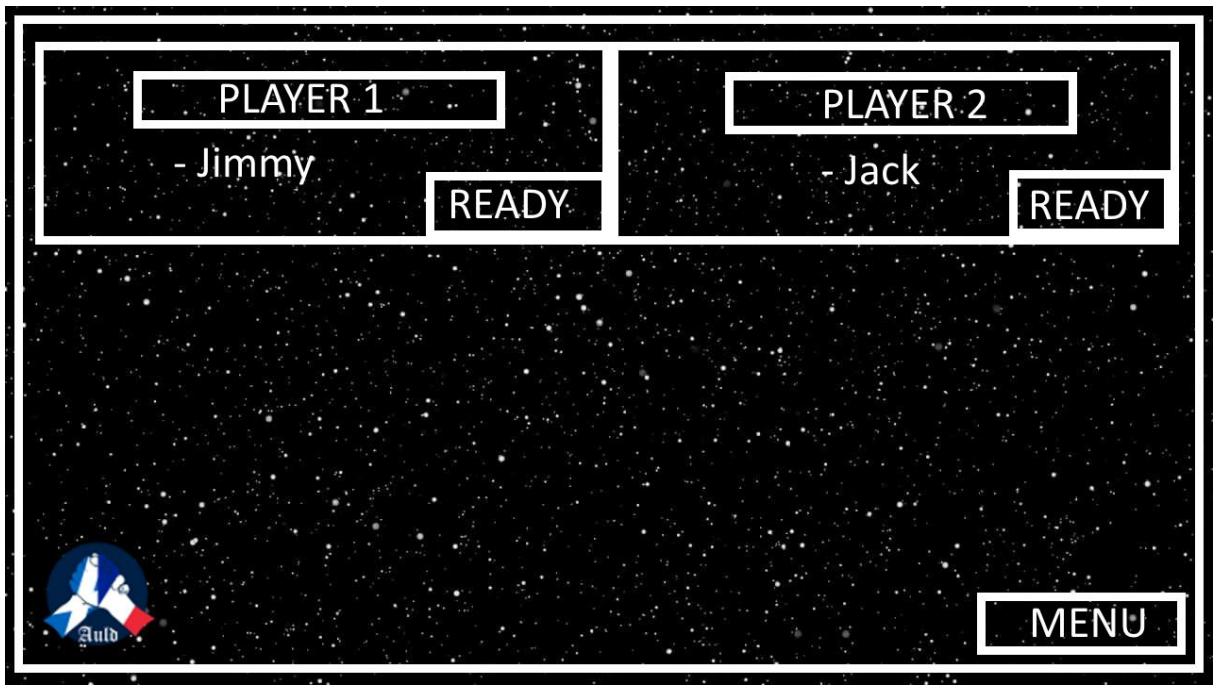
Lobby concept

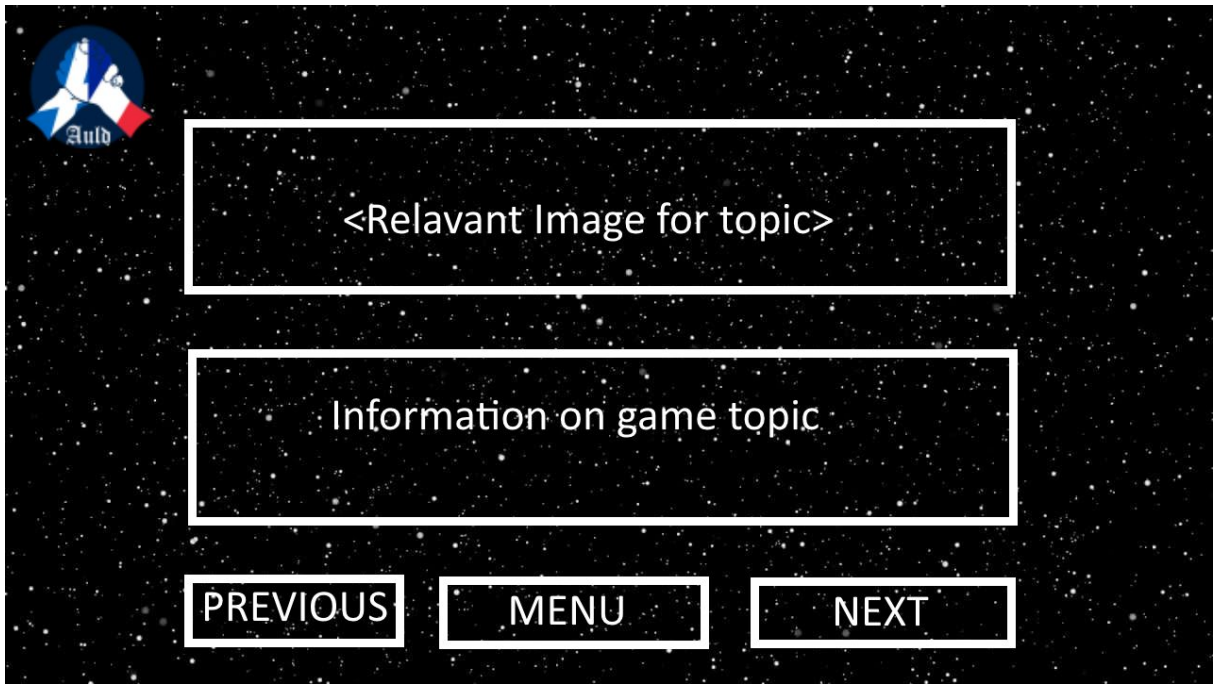
The Lobby will prompt the player to choose a name and then continue they will then find themselves on this screen after which they should choose which player they will be and then finally click the ready button, once both player are ready the game will then begin.



Instruction view concept

This screen will allow the player to learn how the game works prior to starting one there will be images on the particular topic of this tutorial and then information below instructing the player once they're finished on that topic they can click next to move onto the next one or previous to allow them to return to a previous topic. There will be one final button allowing the player to return to the main screen.

James Keohane
Vincent Berthet
Ryan Kennedy
Neoptolemus Papadiofantous



Tech Tree concept

James Keohane
Vincent Berthet
Ryan Kennedy
Neoptolemus Papadiofantous

Communication

Blogspot

The Team Auld uses blogspot as a way to communicate of how the development is going. Blogspot is a blog CMS that allows us to create a reliant blog website where the team can communicate on a weekly basis.

The blog of the Auld link : http://projectauld.blogspot.co.uk/

The blog design is meant to be in a space environment so that the user understands quickly our theme and what genre is oriented our game.

See appendix for blog post.

Prototype

Appendix

Game Design Resources

JELLYGOD EMPIRE							
Weaponry					Shield		
Type	Name	Effect	Material Cost	Energy consumption	Upgrade	Description	Material Cost
Projectile T1	Red Stinger	5 All damage / 1% shield leak	50	1	Shield power 1	Max shield 250	200
Projectile T2		20 All damage / 1% shield leak	200	2	Shield power 2	Max shield 400	500
Projectile T3	Holy Jelly Smite	50 All damage / 5% shield leak	500	5	Shield power 3	Max shield 600	1000
Shield Destroyer T1	Jelly Thalias	5 shield damage/ 1 planet damage	100	10	Shield Regen 1	Shield regen +3	100
Shield Destroyer T2		15 shield damage/ 3 planet damage	300	15	Shield Regen 2	Shield regen +3	200
Shield Destroyer T3		30 shield damage/ 6 planet damage	800	20	Shield Regen 3	Shield regen +3	400
Crippler T1			200		Shield Effect 1	Not implemented	
Crippler T2			300		Shield Effect 2	Not implemented	
Crippler T3	Jelleech Ritual	Leech the opponent shield by draining the shield points and restoring your own shield. Every damage made to the ennemy shield will restore your shield points Duration : 30 seconds	400		Shield Effect 3	Not implemented	

James Keohane
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Ryan Kennedy
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Azerk

Weaponry					Shield		
Type	Name	Effect	Material Cost	Energy consumption	Upgrade	Description	Material Cost
Projectile T1	Fireball	10 All damage / 2% shield leak	80	2	Shield power 1	Max shield 150	200
Projectile T2	Hydrocanon	30 All damage / 5% shield leak	250	4	Shield power 2	Max shield 250	500
Projectile T3	Pressured steam canon	60 All damage / 9% shield leak	450	12	Shield power 3	Max shield 400	1000
Shield Destroyer T1	exploration	2 shield damage/ 1 planet damage	50	10	Shield Regen 1	Shield regen +2	100
Shield Destroyer T2	conquest	5 shield damage/ 1 planet damage	200	15	Shield Regen 2	Shield regen +2	200
Shield Destroyer T3	Ssarah	10 shield damage/ 2 planet damage	300	20	Shield Regen 3	Shield regen +3	400
Crippler T1	Moon invasion	Steal 50% of the moon or asteroid income that the opponent own for 30 sec	150	0	Shield Effect 1	Not implemented	
Crippler T2	Invasion	The opponent have a 5% lost of material income on 60 sec/ can stack	300	0	Shield Effect 2	Not implemented	
Crippler T3	Ragnarok	The ragnarok will bring doom to your opponent. The opponent will receive Damage * 2. OUCH for 10 sec.	1000	0	Shield Effect 3	Not implemented	

True Cyclops

Weaponry					Shield		
Type	Name	Effect	Material Cost	Energy consumption	Upgrade	Description	Material Cost
Projectile T1		10 All damage / 2% shield leak	150	1	Shield power 1	Max shield 150	200
Projectile T2		25 All damage / 5% shield leak	250	5	Shield power 2	Max shield 250	500
Projectile T3		70 All damage / 9% shield leak	500	5	Shield power 3	Max shield 400	1000
Shield Destroyer T1		3 shield damage/ 1 planet damage	100	10	Shield Regen 1	Shield regen +2	100
Shield Destroyer T2		6 shield damage/ 1 planet damage	250	13	Shield Regen 2	Shield regen +2	200
Shield Destroyer T3		10 shield damage/ 2 planet damage	500	15	Shield Regen 3	Shield regen +3	400
Crippler T1					Shield Effect 1	Not implemented	
Crippler T2					Shield Effect 2	Not implemented	
Crippler T3					Shield Effect 3	Not implemented	

Bog nation

Weaponry					Shield		
Type	Name	Effect	Material Cost	Energy consumption	Upgrade	Description	Material Cost
Projectile T1		4 All damage / 1% shield leak	50	1	Shield power 1	Max shield 150	200
Projectile T2		9 All damage / 2% shield leak	150	1	Shield power 2	Max shield 250	500
Projectile T3		15 All damage / 3% shield leak	300	1	Shield power 3	Max shield 400	1000
Shield Destroyer T1		4 shield damage/ 1 planet damage	100	4	Shield Regen 1	Shield regen +2	100
Shield Destroyer T2		8 shield damage/ 1 planet damage	250	6	Shield Regen 2	Shield regen +2	200
Shield Destroyer T3		12 shield damage/ 2 planet damage	500	8	Shield Regen 3	Shield regen +3	400
Crippler T1					Shield Effect 1	Not implemented	
Crippler T2					Shield Effect 2	Not implemented	
Crippler T3					Shield Effect 3	Not implemented	

James Keohane
Vincent Berthet
Ryan Kennedy
Neoptolemus Papadiofantous

Team meetings

Meeting 1

COMP09097 Games Development Project

Progress Meeting - <Project Auld>

Wednesday 21st September ,9-11am, UWS Computer Labs.

Those attending
James Keohane
Ryan Kennedy
Vincent Berthet

Apologies for absence
N/A

Project Status: Green

Work completed since previous meeting

Some of the main mechanics were designed and the main objective of the game has been defined.

Task planning on Trello for the week to come have been achieved.

The first blog entry has been done by Ryan

The account on GDrive, Slack, Trello have been created and everything is related.

Work planned before next meeting

Create a git account and preparing the coding environment for every member on their PC.

Start the initial level design on Unreal.

Start creating the Game Design Document, the proposed plan and write the design element that we thought of.

Create a template for the team blog and write the second blog entry. Try to make a space background, sci-fi related.

Each team member will design a race with their specificities:

- Background Aspects:

James Keohane Ryan Kennedy
Vincent Berthet Neoptolemus Papadiofantous

    - Race Name
    - Their physical aspect
    - How they live
    - Resources

- Mechanics:
    - Defence
    - Attack
    - Gather resources

- Development:
    - Economy
    - Science
    - Armament
    - Religion
    - Defence

Any Other Business

Vincent had problems with is PC: Windows have to be re-installed.

Meeting 2

COMP09097 Games Development Project

Progress Meeting - <Project Auld>

Wednesday 14th September ,10-11am, UWS Computer Labs.

Those attending

James Keohane
Ryan Kennedy
Vincent Berthet

Apologies for absence

N/A

Project Status: Green

Work completed since previous meeting

Game Idea and concepts discussed with team members.

Tools choice – IDE – software to be used for project management (MS Project).

Unreal engine will be used.

A PC 2D game will be designed. The game will look like a real time strategy concept with a lot of resource management and technology research than combat managing.

The game is based in space environment and advanced technology for multiple nations and races.

Work planned before next meeting

Account on: Trello, Slack, Google Drive for file sharing and project communication (management).

Download and familiarise yourself with Unreal Engine.

Audacity chosen for the audio in the game.

Team roles are defined:

Leader: James Keohane

Developer: Ryan Kennedy, Vincent Berthet

Emails for each team member:

- keohanej.info@gmail.com
- ryan_kennedy_1994@hotmail.co.uk
- vincent.berthet42@gmail.com

Optional readings:

Tracy Fullerton: *game design workshop*

Richard Hill-Whittall: *The indie game developer handbook*

Meeting 3

COMP09097 Games Development Project

Progress Meeting - <Project Auld>

Wednesday 28st September, 9-11am, UWS Computer Labs.

Those attending
James Keohane
Ryan Kennedy
Vincent Berthet
Neoptolemos papadiofantous

Apologies for absence
N/A

Project Status: Green

Work completed since previous meeting

Vincent worked on the second blog entry.
He also designed 2 nations for the game:

- The Azerk : A primal nation which practice blood sacrifice
- And the Iorn : A Mechanical race nation

Ryan worked on UE4, he started to work on the project and stars level, setting the game environment, worked on a nation.

James worked on the GDD, proposed plan and games mechanics: main planet, weaponry.

We talked about resources and their mechanics within the game, population, story, nations.

We settled the work environment for Thomas.

Work planned before next meeting

Thomas will learn UE4 and work on the technical report. He will try to get Git working on his computer.
Vincent has to work on the blog design, and on the third post entry.
Ryan has to upload his UE4 project on Git and do a list of game features to implement.
James will be working on the GDD: Main planet resources, Weaponry, Shield.

We will try to get GIT working for everybody.
And we will do an online meeting on skype before Monday.

Meeting 4

COMP09097 Games Development Project

Progress Meeting – Project Auld

Wednesday 5th October, 11:30am, UWS Computer Labs.

Those attending:

- **Ryan**
- **James**
- **Thomas**
- **Vincent**

Project Status: Green

Work completed since previous meeting

- Game design document: (James)
  - Resources
  - Main planet
  - Game Data
  - Weaponry
  - Shield
- Technical Design started (Ryan and Thomas)
- Blog Design (Vincent)

Work planned before next meeting

- Work on Technical Design
  - Diagram User (Ryan)
  - User Interface hand concept (Ryan)
  - Game Procedures (James)
- Push Unreal Project – make sure everyone receives the unreal document on git (Ryan)
- Having mid-week meeting to discuss progress (Team)
- Each member to finish off their Nation Design (Team)
- Game Design Document:

    - Game Data Excel (James)
- Sound Design
    - Sound design research (Thomas)
    - Look for a Sound Software (Thomas)

Any Other Business
Vincent was sick that day. So no work assigned for now.

Meeting 5

COMP09097 Games Development Project

Progress Meeting – Project Auld

Wednesday 12th October, 11:00am, UWS Computer Labs.

Those attending:

- **Ryan**
- **James**
- **Thomas**
- **Vincent**

Project Status: Green

Work completed since previous meeting

3 nations have been worked since last meeting, the Jellygod nation and his weaponry are ready, the Azerk nation template is finished and the Bug nation (Still waiting for a name) template is finished.

James has worked on the game design document adding writing some mechanics on the battlefield visibility. Design of the Power of Faith finished and started the development branches.

Ryan worked on the GUI (Command centre) handmade sketches have been done so far.

Vincent worked some more on the blog aspects by adding more css.

Thomas looked out for some Sound Software and we all agreed on taking audacity because it's easy to use and free.
He also started to work on the Data Management and flow.

Work planned before next meeting

Ryan will implement the menu in the Unreal Project and the weaponry of his nation.

Vincent will work on the weaponry of his nation.

Thomas will have to do his nation template.

James will development Branch
Global Work Review

Meeting 6

COMP09097 Games Development Project

Progress Meeting – Project Auld

Wednesday 26th October, 11:00am, UWS Computer Labs.

Those attending:

- **Ryan**
- **James**
- **Thomas**
- **Vincent**

Project Status: Green

Work completed since previous meeting

Ryan nation template has been completed.

James filled the weaponry part of the GDD.

James and Vincent have fill the main features of their race (starting features as shield point, planet life) and designed their weaponry.

Vincent added a blog entry dealing on these 2 nations.

Thomas looked out for some Sound Software and he worked with Ryan on the Technical report.

Work planned before next meeting

Ryan will implement the menu in the Unreal Project and the weaponry of his nation.

Thomas will have to do his nation template.

Global Work Review!!!

Meeting 7

COMP09097 Games Development Project

Progress Meeting – Project Auld

Wednesday 2nd November, 11:00am, UWS Computer Labs.

Those attending:

- **Ryan**
- **James**
- **Thomas**
- **Vincent**

Project Status: Green

Work completed since previous meeting

A short global work review was organized Monday 31st October, but only Vincent and James were at this meeting.

Vincent added information in the GDD and technical report.

Thomas create camera basis on UE, but it was confusing because we need to talk in team about that.

James talked with Gavin Baxter in order to get information about the team presentation of the 30th November.

Work planned before next meeting

Ryan and Thomas must complete a blog entry to introduce their nation. Moreover, they need to success to push their Unreal Engine project on the git instead of put it on our GDrive.

Vincent will do the entry of this week on the weaponry.

James will check and complete GDD document and technical report.

COMPLETE Global Work Review!!!


Auld

Meeting 8

COMP09097 Games Development Project

Progress Meeting – Project Auld

Wednesday 9th November, 11:00am, UWS Computer Labs.

Those attending:

- **Ryan**
- **James**
- **Thomas**
- **Vincent**

Project Status: Green

Work completed since previous meeting

Thomas has written a piece of the technical report.

James has done the project management part of the GDD, written game mechanics and made some correction with Vincent review.

Ryan completed information around his Nation (Swarm).

Vincent has filled blog entry and weaponry document.

Work planned before next meeting

Thomas must completed a blog entry (W5 - Nation : Thomas & Ryan) to introduce their nation.

Ryan and Thomas should succeed to push their Unreal Engine project on the git and start the proof of concept.

James is working on tech trees.

Vincent is working around faith spells of different Nations.

Meeting 9

COMP09097 Games Development Project

Progress Meeting – Project Auld

Wednesday 16th October, 11:00am, UWS Computer Labs.

Those attending:

- **Ryan (Absence not justified)**
- **James**
- **Thomas (Absence not justified)**
- **Vincent**

Project Status: Amber

Work completed since previous meeting

Global tech tree done for all the nations and merging Ryan and Thomas work into a single game design document.

Proof of concept no status updated from Ryan and Thomas.

Ryan has made some more user interface concept and Photoshop.

Power of faith not finished by Vincent
Blog done by Vincent

Work planned before next meeting

Vincent has to finish power of Faith before next week-end and write the blog entry of the week.

Ryan and Thomas are working on the proof of concept, would be good to have some feedback.

Thomas still must complete the blog entry (W5 - Nation: Thomas & Ryan) to introduce his nation.

Ryan and Thomas should succeed to push their Unreal Engine project on the git.

Ryan has to finish the user interface concept.

James will be polishing the game design document before sending it to Gavin Baxter.


Auld

Meeting 10

COMP09097 Games Development Project

Progress Meeting – Project Auld

Wednesday 23th October, 11:00am, UWS Computer Labs.

Those attending:

- **Ryan**
- **James**
- **Thomas**
- **Vincent**

Project Status: Amber Proof of concept is RED

Work completed since previous meeting

Ryan and Thomas worked on a proof of concept but unfinished

James finalised the game design document

Vincent designed the power of Faith and made the blog

Work planned before next meeting

The Team will work on the presentation on Saturday at 10 AM

Ryan and Thomas have to finish the proof of concept.

Meeting 11