



HUNT - EXTERMINATION

A FULLY 3D REAL TIME STRATEGY GAME

COMP 1287 GAME DESIGN AND DEVELOPMENT
KH1469S 001079030
GAME DOCUMENTATION

CONTENTS

GAME OVERVIEW.....	3	CONTROLS.....	19
INSPIRATIONS.....	4	UI/MENU DESIGNS.....	20
GAME WORLD/S.....	6	HUD DESIGNS.....	22
USMC.....	7	ASSETS.....	23
THE PROGENITORS.....	8	DEVELOPMENT PLANS.....	24
THE SKEIN.....	9	TIME PLAN.....	24
STORY/DESIGNS.....	10	JUSTIFICATION.....	25
GAMEPLAY.....	17	LEGAL ISSUES.....	26
MECHANICS-PLAYER.....	18	REFERENCES.....	27

GAME OVERVIEW

- A 3D REAL TIME STRATEGY GAME
- A BATTLE OF STRATEGY AND WITS AGAINST AI AND PLAYERS ALIKE
- BUILD A BASE, CREATE AN ARMY AND WIPE OUT THE ENEMIES
- AN OPPORTUNITY TO REVIVE THE RTS GENRE AND TO DEVELOP ADVANCED AI SYSTEMS
- DESIGNED FOR ANYONE TO BE ABLE TO PLAY, BUT WILL APPEAL MORE TO OLDER (21 PLUS) PLAYERS WHO ARE VETERANS OF RTS GAMES
- BUILT FOR PC AND MAC

INSPIRATIONS

THE GAME WAS INSPIRED BY A NUMBER OF DIFFERENT REAL TIME STRATEGY GAMES, WITH THE COMMAND AND CONQUER SERIES, SPECIFICALLY THE TIBERIUM SAGA (1995 - 2010), BEING A PARTICULARLY PROMINENT SOURCE OF INSPIRATION. OTHER SOURCES INCLUDE STARCRAFT (1998), ALIEN VS PREDATOR: EXTINCTION (2003) AND THE WARHAMMER 40,000 DAWN OF WAR SERIES (2004-2017). THESE GAMES ALL FEATURE SIMILAR GAMEPLAY MECHANICS AND AI SYSTEMS THAT WILL BE IMPLEMENTED INTO THE FINAL PRODUCT

INSPIRATIONS



PARAWORLD (SUNFLOWER INTERACTIVE AND SEK,
2006)



COMMAND AND CONQUER 3 TIBERIUM WARS
(ELECTRONIC ARTS, 2007)

GAME WORLD / S

- 3 PLAYABLE RACES- USMC, PROGENITORS AND THE SKEIN ; EACH HAVING THEIR OWN IN-DEPTH CAMPAIGN AND LORE
- BATTLE WILL TAKE PLACE ON A MULTITUDE OF PLANETS, SHOWING THE EXTENT OF THE WAR BETWEEN THE RACES
 - AMALTHEA - RESEARCH MOON ORBITING JUPITER, RESEARCHING INTO METHODS TO ELIMINATE THE SKEIN AND ANALYSE PROGENITOR TECHNOLOGY
 - CRIVITAR PRIME - HOME WORLD OF THE PROGENITORS
 - ANAROKAN - HAZWORLD COVERED IN A PLANET SPANNING JUNGLE AND FILLED WITH INNUMERABLE QUANTITIES OF LETHAL FAUNA AND FLORA, SOME OF WHICH ARE SKEIN EVOLUTIONARY RELATIVES
 - TARTARAN - DEATH WORLD ERADICATED BY THE SKEIN

GAME WORLD / S

UNITED SOLARI MARINE CORPS BETTER KNOWN AS THE USMC IS THE PRIMARY FIGHTING FORCE OF THE SOLARI SYSTEM (A REPLACEMENT NAME FOR OUR SOLAR SYSTEM AS THE OLD ONE WAS TOO GENERIC AND USABLE FOR ANY SYSTEM OF PLANETS ORBITING A STAR). THESE GUYS ARE YOUR ATYPICAL GRUNTS, ONLY INTERESTED IN FIGHTING AND UHM FINDING NEW PLANETS OF COURSE. DEFINITELY FINDING PLANETS AND NOTHING ELSE. WHAT THEY LACK IN INTELLIGENCE AND GENERAL MANNERS THEY MAKE UP FOR WITH STATE OF THE ART WEAPONRY SYSTEMS AND STARSHIPS. THEIR INTEREST IN THE WAR STEMS FROM THE FACT THAT THE SKEIN ARE BEELINING STRAIGHT TO LUA AFTER AN UNKNOWN SIGNAL BEGAN TO BROADCAST, AND WITH THE AFTERMATH OF THE SKEIN BEING APPARENT, THEY DON'T PARTICULARLY WANT TO CONTINUE THE TREND OF BEING WIPE OUT.

GAME WORLDS

THE PROGENITORS ARE AN ANCIENT SPACE FARING RACE WHO'S CULTURE IS ROOTED IN TRIBALISM AND GRAND HUNTS. THEIR TECHNOLOGY PREDATES ANY RECORDED PRESENCE OF HUMANS BUT HAS BEEN FOUND ALL THROUGHOUT THE SOLARI SYSTEM, INDICATING THEY HAVE VISITED BEFORE. WHILE BEING KNOWN TO BE TRIBAL AND BORDERLINE SAVAGE, THEIR CULTURE EXHIBITS A STRICT CASTE SYSTEM WITH ELDERS AND YOUTHS REQUIRING AN INITIATION RIGHT. IT IS THROUGH THIS INITIATION RIGHT THAT THE PROGENITORS ARE WELL VERSED IN COMBAT WITH THE SKEIN, SEEING AS HOW THEY ARE THE PREFERRED PREY IN INITIATIONS FOR MANY CENTURIES PAST.

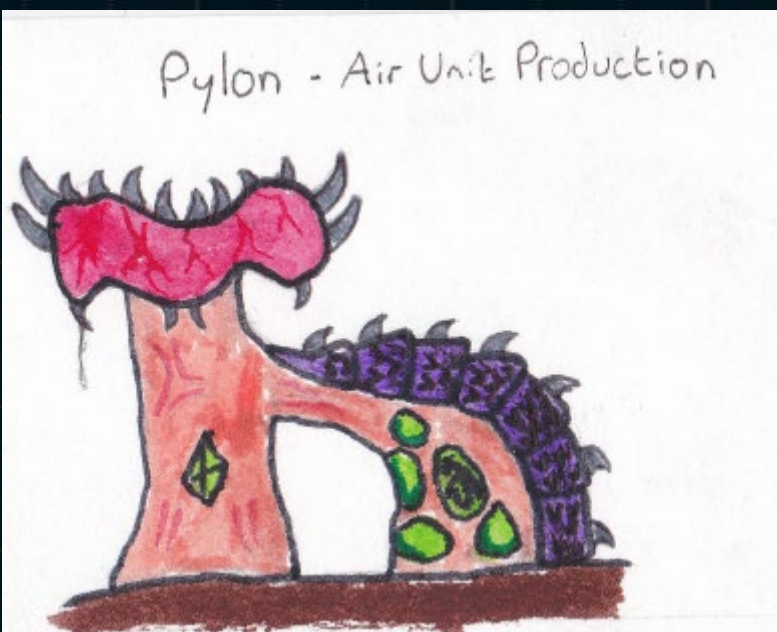
GAME WORLD / S

THE SKEIN ARE THE BIG BAD OF THE GALAXY. TECHNICALLY AN EXTRAGALACTIC THREAT, THE SKEIN AREN'T FROM THE SOLARI SYSTEM OR ANY OTHER SYSTEM IN THE MILKY WAY. AS SUCH, VERY LITTLE IS ACTUALLY KNOWN ABOUT THIS RACE. ALL THAT IS KNOWN IS THAT THEY ARE A SWARM COLLECTIVE, FUNCTIONING THROUGH AN UNKNOWN AND UNTRACEABLE HIVE MIND. THEY INVADE PLANETS THAT SHOW ANY TRACE OF BIOLOGICAL LIFE, ONLY TO DEVOUR EVERY LAST TRACE LEAVING A DEATH WORLD IN THEIR WAKE. THEY USE THIS BIOMASS TO IMPROVE THEIR RACE AND LEARN ABOUT THEIR PREY. THE SKEIN ARE KNOWN TO HAVE NO NATURAL PREDATORS, HOWEVER THEY DO SEEM TO HAVE A FEUD WITH THE PROGENITORS, AS THEY HAVE BEEN SEEN RITUALISTICALLY HUNTED DURING THE INITIATION RIGHTS OF THE YOUNGER PROGENITORS. THAT'S NOT TO SAY THEY DON'T SOMETIMES WIPE OUT THEIR HUNTERS BUT HEY ITS WORTH NOTING.

STORY

THE GAME TAKES PLACE IN THE 23RD CENTURY. THE UNIVERSE IS ON FIRE. THE UNITED SOLARI MARINE CORPS FIGHT A WAR ON ALL FRONTS. INSURGENTS THREATEN PEACE IN THE SYSTEM WHILE THE UNENDING SKEIN SIEGE FROM THE EDGES OF THE KNOWN GALAXY. WHILE THIS IS HAPPENING, THE PROGENITORS ARE LYING IN WAIT, STRATEGIZING A WAY TO DEFEAT THE SKEIN IN ONE FELL SWOOP. UNBEKNOWNST TO ALL THE AGGRESSORS IS THAT BEHIND THE VEIL AND EVIL ANCIENT FORCE PULLS THE STRINGS, TRYING TO CONQUER THE GALAXY THAT IT BELIEVES IT RIGHTFULLY OWNS...

DESIGNS - SKEIN STRUCTURES



DESIGNS - SKEIN STRUCTURES



DESIGNS - SKEIN UNITS

Devil - Fast, Guerilla, Melee



Slither/Spitter - Fast, Guerilla,
Ranged, Poisoned

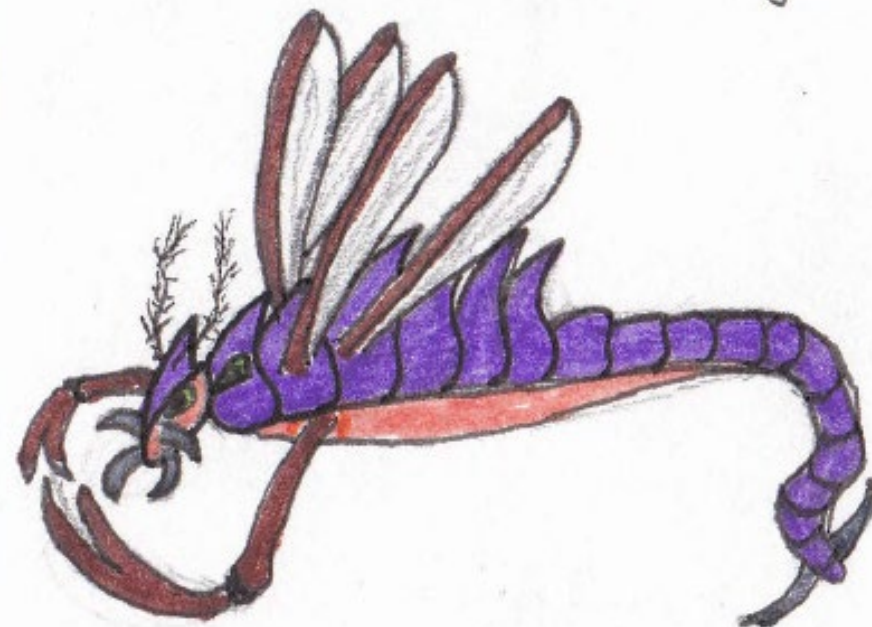


DESIGNS - SKEIN UNITS

Wurm - Fast, Flyer, Melee

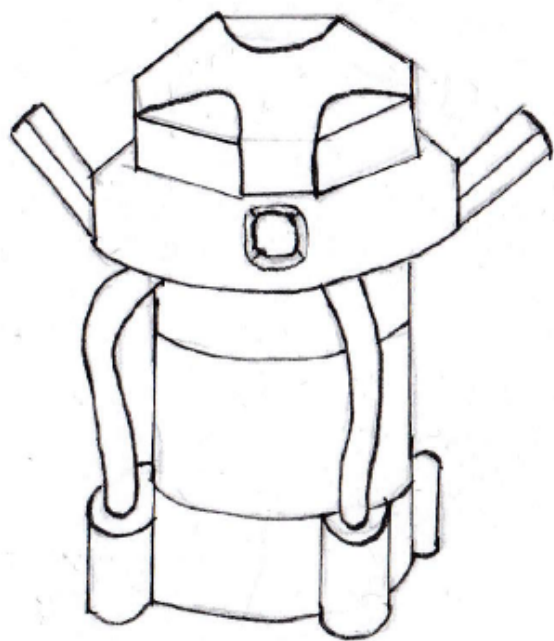


Screamer - Fast, Flyer, Ranged



DESIGNS - USMC STRUCTURES

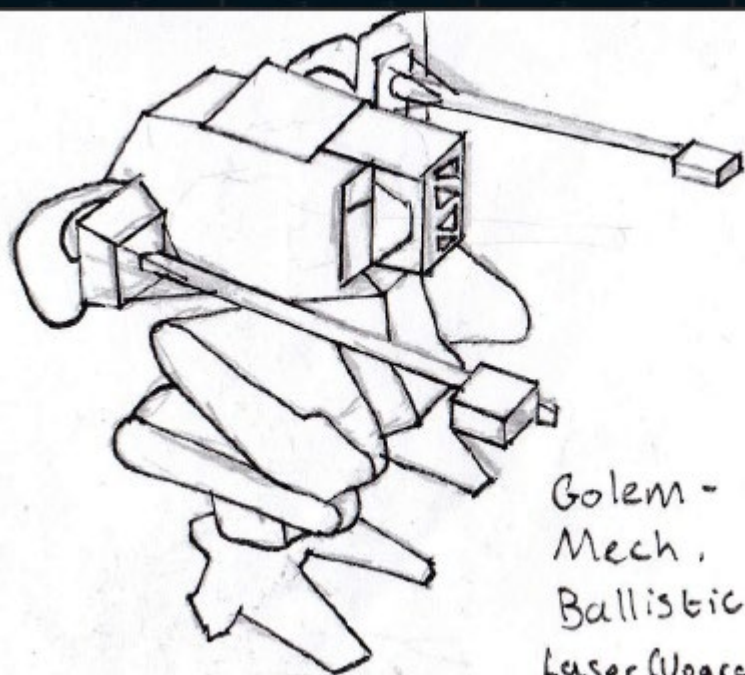
Ion Generator -
Power Building



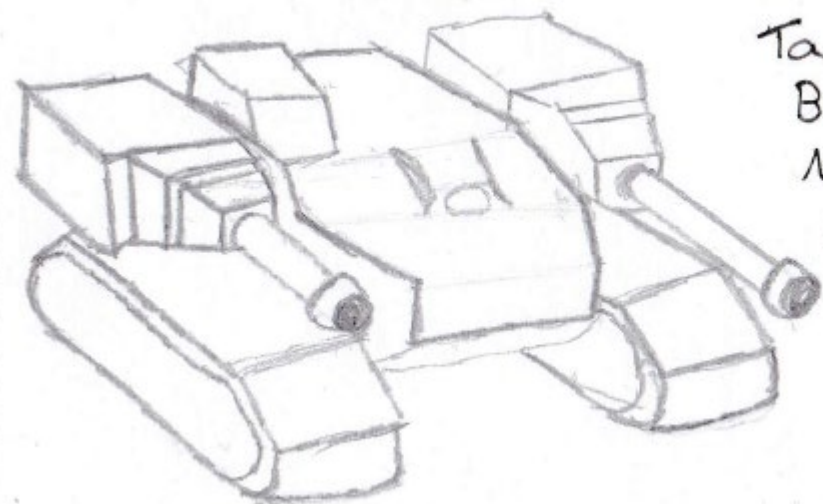
Hangar -
Air Unit
Production



DESIGNS - USMC UNITS



Golem -
Mech,
Ballistic,
Laser (Upgrade)



Judge -
Tank,
Ballistic,
Missile
(Upgrade)

GAMEPLAY

THE GAMEPLAY LOOP FOLLOWS THE SAME AS MOST OTHER REAL TIME STRATEGIES. PLAYERS START WITH A SINGLE BUILDING THAT FACILITATES PRIMARY CONSTRUCTION NEEDS. THE PLAYER ALSO STARTS WITH A NUMBER OF CURRENCY DETERMINED IN THE GAME OPTIONS BEFORE THE MATCH. PLAYERS MUST INITIALLY SET UP AN ECONOMY BY HARVESTING LAVA VIA BUILDING A RESOURCE COLLECTING PLANT THAT COMES WITH A GATHERER UNIT. THE PLAYERS ALSO MUST MAINTAIN A HIGH ENOUGH POWER/ENERGY LEVEL THROUGH BUILDING LIGHTNING PLANTS WHICH WILL CREATE LOCALISED STORMS TO BE HARVESTED. PLAYERS THEN MUST BUILD UP AN ARMY THROUGH BUILDINGS DESIGNED TO CREATE DIFFERENT UNIT TYPES (INFANTRY, GROUND VEHICLES, AIR VEHICLES, SUPER UNIT) WHILE ALSO BUILDING UP SUFFICIENT BASE DEFENCES TO COUNTER THE ENEMY ATTACKS FROM THEIR ARMIES. CERTAIN BUILDINGS WILL GIVE OPTIONS TO UPGRADE UNITS, DEFENCES OR ECONOMY. THE GAME ENDS WHEN ALL OPPOSING PLAYERS ARE ELIMINATED.

MECHANICS - PLAYER

BASE BUILDING

RESOURCE GATHERING

POWER/ENERGY LEVEL

UNIT CREATION

SPECIAL POWERS - UNITS

SPECIAL POWERS - RACE SPECIFIC

NAVIGATION MESH FOR UNIT CONTROL

BASIC AI FOR UNITS

HIDDEN EXPERIENCE SYSTEM FOR UNITS

CONTROLS

WASD - MOVE THE CAMERA AROUND THE BATTLEFIELD

LEFT MOUSE BUTTON - SELECT UNIT/BUILDING, DRAGGING A BOX ALLOWS FOR MULTIPLE UNITS TO BE SELECTED

RIGHT MOUSE BUTTON - MOVE UNITS, SET WAYPOINTS FOR BUILDINGS

SCROLL WHEEL - ZOOM CAMERA IN/OUT

MIDDLE MOUSE BUTTON - ROTATE CAMERA (HELD + ROTATE LEFT AND RIGHT), MOVE CAMERA (HELD + FORWARD AND BACK)

ESC - OPENS THE PAUSE MENU

CTRL + F KEYS - SETS UP CONTROL GROUPS FOR FAST SELECTION

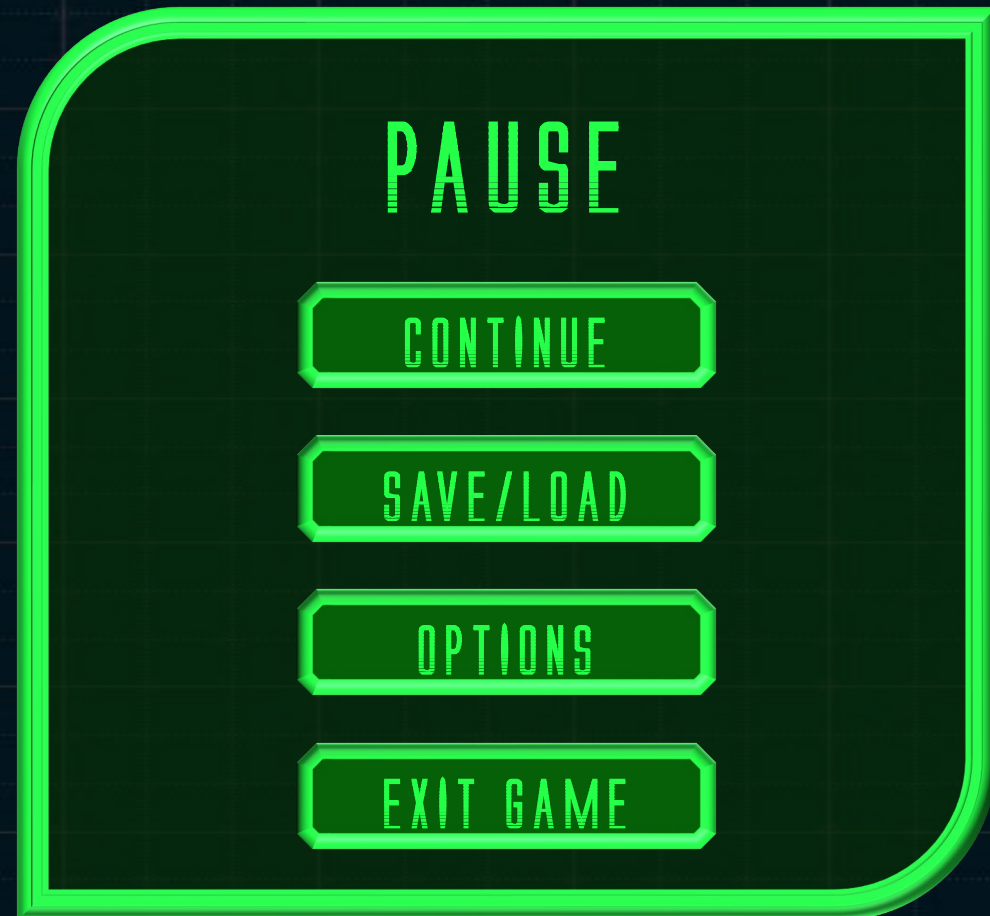
SPACE - MOVES CAMERA TO SELECTED UNITS

UI / MENU DESIGNS

A SIMPLE PAUSE MENU SCREEN THAT FEATURES THE BASICS NEEDED IN ANY RTS GAME.

PAUSE MENU'S CANVAS WILL BE SLIGHTLY TRANSPARENT, IN CASE THE PURPOSE FOR THE PAUSE IS TO "PLAN"

OPTIONS MENU WILL OPEN IN THE SAME CANVAS RATHER THAN OPENING A NEW CANVAS



UI / MENU DESIGNS

A CONCEPT FOR THE MAIN MENU SCREEN OF HUNT

DESIGNED TO PAY HOMAGE TO OTHER REAL TIME STRATEGY GAMES

UTILISES LORD OF THE RINGS BATTLE FOR MIDDLE EARTH'S POSITIONING OF BUTTONS

UTILISES EA-MADE RTS GAMES STYLE OF AN EXPANDING MENU, WITH OTHER OPTIONS APPEARING WHEN A BUTTON IS HIGHLIGHTED



HUD DESIGN

A RENDITION OF THE HUD FOR IN GAME

SPECIAL POWERS APPEAR ON THE LEFT SIDE,
RANGING FROM RADAR SWEEPS TO SUPERWEAPONS

RIGHT SIDE FEATURES A MINIMAP, POWER GAUGE,
RESOURCE COUNTER, REPAIR BUTTON, SELL BUTTON
AND A BUILD MENU

THERE WILL ALSO BE A SELECTED UNIT SCREEN
THAT SHOWS ACCURATE HEALTH STATS AND ANY UNIT
SPECIFIC POWERS

COLOURS WILL CHANGE FOR THE HUD TO MATCH THE
FACTION PLAYED (GREEN FOR USMC, RED FOR SKEIN,
YELLOW FOR PROGENITORS)



ASSETS

3D

- MODELS
 - UNITS
 - BUILDINGS
 - LEVELS/MAPS
 - BUILDINGS/TERRAINS
- MATERIALS
 - MODELS
 - TERRAIN

- VISUAL EFFECTS (EXPLOSIONS, ETC)

2D

- CARDS
 - UNITS
 - BUILDINGS
 - POWERS
- HUD AND USER INTERFACE

SOUND DESIGN

- MUSIC
- SOUND EFFECTS
- UI SOUNDS (WHEN HOVERING AND PRESSING ON BUTTONS)

DEVELOPMENT TIME-FLOWS

TASKS

Conceptualisation:

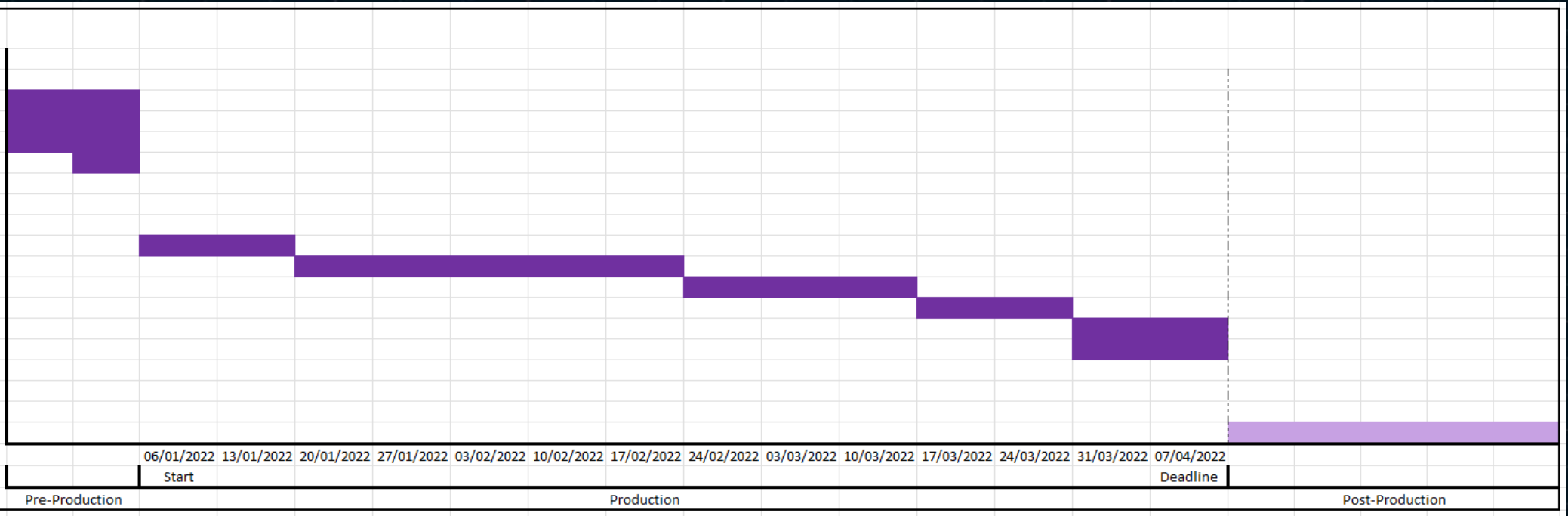
Artwork
UI designs
Documentation
Asset gathering

Development:

Modelling
Scripting
UI design
Assembly
Testing
Fixing

Post Production:

Installation



JUSTIFICATION

THE GAME WILL BE DEVELOPED USING THE UNITY GAME ENGINE VERSION 2020.3.4F. THE ENGINE WILL PERFORM ALL THE NECESSARY REQUIREMENTS DUE TO ITS INBUILT FEATURES. NAVMESH WILL BE ABLE TO CONTROL THE MOVEMENT OF THE UNITS AROUND THE MAPS, ENSURING THEY DO NOT FALL INTO PITS, CLIMB MOUNTAINS OR TRAVEL OFF THE SIDES OF THE MAP. THE ENGINE ALSO MAKES USE OF OTHER IMPORTANT FEATURES THAT WILL ASSIST WITH THE MODELS, SUCH AS ANIMATION TREES. FINALLY, ANY CRUCIAL ITEMS THAT CANNOT BE DEVELOPED BY A SINGLE PERSON CAN BE SUBSTITUTED WITH ITEMS FROM UNITY'S ASSET STORE.

THE MODELS FOR THE GAME WILL MOSTLY BE DEVELOPED USING BLENDER. THIS HAS BEEN DECIDED AS THE APPLICATION OF CHOICE FOR SEVERAL REASONS. FIRST ITS MORE AVAILABLE BEING A FREE SOFTWARE COMPARED TO MAYA AND ZBRUSH. ADDITIONALLY, BLENDER IS BETTER SUITED MAKE MODELS AS IT IS EASIER TO DEVELOP LOW-POLY MODELS QUICKLY WHILE THE SOFTWARE ITSELF CAN ADAPT TO SUIT NEEDS TO WORK IN WITH UNITY.

FINALLY ANY 2D ASSETS WILL BE DEVELOPED IN ADOBE PHOTOSHOP AND FIREALPACA. FIREALPACA IS A SIMPLE TO USE FREE DRAWING SOFTWARE WHILE PHOTOSHOP WILL EASILY BE ABLE TO DO ANY TOUCH-UPS REQUIRED BEFORE THE ASSETS ENTER THE GAME.

LEGAL ISSUES

HUNT: SHOWDOWN WILL PROBABLY BE CLASSIFIED AS A 16+ GAME BASED ON THE PAN EUROPEAN GAME INFORMATION (PEGI). THIS WILL BE DUE TO THE FOLLOWING MOST LIKELY BEING FEATURED IN THE GAME AND FLAGGED BY THE RATINGS: VIOLENCE, BAD LANGUAGE AND ONLINE FEATURES (IN THE FUTURE OF THE GAME).

MOST OF THE LEGAL MATTERS IN THIS GAME WILL COME FROM THE FACT THAT SOME ASSETS ARE THIRD PARTY. THIS HOWEVER HAS BEEN RESEARCHED INTO AND ALL THE ASSETS ARE ROYALTY FREE. ADDITIONALLY ALL MODELS WILL BE CREDITED TO THEIR RIGHTFUL OWNERS IN THE GAMES CREDITS.

FINALLY, THE APPLICATIONS USED HAVE POSSIBLE LEGAL ISSUES, SPECIFICALLY UNITY, MAYA AND PHOTOSHOP. THESE APPLICATIONS ARE ALL USING STUDENT AND PERSONAL LICENSES AND AS SUCH THERE ARE SOME CLAUSES THAT MUST BE ADHERED WITH THE DISTRIBUTION OF THE FINALISED GAME, THAT BEING THAT PROFITS CANNOT EXCEED £100,000 IF THE GAME IS SOLD.

REFERENCES

- **BACKGROUND FOR MENU DESIGN** - [HTTPS://WALLUP.NET/SCIENCE-FICTION-LANDSCAPE-SPACE-PLANET-DIGITAL-ART-APOCALYPTIC-2/](https://wallup.net/science-fiction-landscape-space-planet-digital-art-apocalyptic-2/)
- **IMAGE FOR PARAWORLD** - [HTTPS://STATELYPLAY.COM/WP-CONTENT/UPLOADS/2018/04/RT6F40W-905X509.JPG](https://stateplay.com/wp-content/uploads/2018/04/RT6F40W-905X509.JPG)
- **IMAGE FOR COMMAND AND CONQUER 3 TIBERIUM WARS** - [HTTPS://WWW.GAMESPOT.COM/A/UPLOADS/ORIGINAL/GAMESPOT/IMAGES/2007/010/REVIEWS/779998-992602_20060111_001.JPG](https://www.gamespot.com/a/uploads/original/gamespot/images/2007/010/reviews/779998-992602_20060111_001.JPG)
- **SCI FI EMBLEM** - [HTTPS://WWW.PNGAAA.COM/DETAIL/1605261](https://www.pngaaa.com/detail/1605261)