**WH40k Fan Game GDD (Draft 1)**

**Gameplay:**

The game is going to be inspired by the “Intelligent Creations” games; Advanced Wars and Fire Emblem.

The main gameplay will take place on a grid map where the player will have to complete an objective in order to win the map. Objectives could include capturing a stronghold, escaping a deadly battleground, defending an area from waves of foes etc.

Each map will contain a selection of player characters as well as a large amount of foes for the player to dispatch.

The game is turn based, with the player taking turn one and the CPU starting on turn 2. On each turn, the player will move their units around the map and may choose to engage in combat with the enemy. If combat is engaged, a transition will occur to the combat screen where the two opposing characters will fight.

This game runs on a permadeath system. If a player character dies, they die for good. If the “Main” character dies, the game is over.

This game is set to feature individual characters, each with a class and each class has a selection of weapons to choose from. Character can progress, level up and promote their class.

The player will encounter new characters and may even recruit some of them during a combat mission. The missions the player will face, however, may not allow them to bring every character they have recruited.

Before each mission, the player will be expected to selected their chosen characters. They may also be able to buy and maintain their equipment.

As a preliminary outline, the game will features 13 levels with the option to add or remove levels for sake of development. The whole game will be split up in to 4 acts of 3 levels, with a final levels to cap it all off.

**Pre-production pipeline:**

This isn’t more forte, so will likely need to be re-evaluated.

I suggest that we start by doing what it takes to get one level done first. Focussing on (in not particular order)

* Grid-based movement
* Turn order
* Player characters
* Enemy characters
* Map Obstacles
* Combat transition
* Character Death

For the time being, we ought to omit anything that may result in us getting ahead of ourselves. If we say the first level has 4 playable characters, we don’t start working on the potential fifth character, for instance. We can likely leave out battle preparations and menus, too.

After we have the first level down, we can start to stretch to the first 3 levels and increment what our production process.

**Playable characters.**

I’m writing this GDD with the intention for the playable characters to be individuals, rather than squads.

Each character is built up from an array of stats which have a percentage chance of improving each time a character levels up. Below are a list of stats and the aspects of gameplay which they will influence.  
(*I am naming the stats according to the naming conventions of 40k, but this is simply flavour. This is not intended as a 1-1 translation of the 40k stat system)*

* Wounds (W)
  + This is the HP stat of the game. This stat ranges from a minimum of 0 to a maximum of 80.
  + When a character is reduced to 0 wounds, that character is dead.
  + When a character dies they die permanently in the standard game mode. A non-permadeath setting should also be available when starting the game.
* Strength (S)
  + Determines the base amount of damage a character perform
  + Weapons will also come with a strength stat. The Character Strength (CSt) + Weapon Strength (WSt) will determine the Total Damage\* of an attacking character
* Toughness (T)
  + Determines the defence of a character
  + When receiving an attack, the toughness stat is used by the defending character to mitigate the hit and calculate the Final Damage(FD). \*Total Damage – Toughess = FD
* Psyker Strength (PsS)
  + Determines the amount of damage a Psychic attacking will perform
  + A Psychic Power will work similar to the weapons stated, above. Psyker Strength (PsS) + Power Strength (PoS) will determine the Psychic Damage\*\* of an attacking character
* Invulnerability (Inv)
  + Determines the Psychic Defence of character
  + When receiving a Psychic attack, the Inv stat is used by the defending character to mitigate the hit and calculate the Final Damage(FD). \*\*Psychic Damage – Invulnerability = FD
* Weapon Skill (Ws)
  + Weapon skill is used in calculate the hit rate of a character, as well as their critical hit chance
* Initiative (I)
  + Used to determine the speed of which a character’s attacks.
  + While the attacking character always goes first. Having a much higher initiative will result in the offensive character hitting more than once
* Leadership (Ld)
  + This is the equivalent of a “Luck” stat. This is used for calculating avoidance and works towards critical hits
* Movement (M)
  + Determines how far a character can move on the map
* Level (Lvl)
  + Simply displays the characters level. Increases when a character maxes out the Experience for their current level
* Experience (XP)
  + A bar which determines how far the character is from levelling up. Has a minimum value of 0 and a maximum value of 100. A character will receive experience for performing actions such attacking, killing an enemy, casting a psychic power or healing another character.

**Stats Cont. Grow Rates and levelling**

As mentioned in the previous section. Each character will have an array of stats which is displayed to the player. Each Stat (Including Level) has a maximum value of 20, except Wounds and Experience (outline above)

However, the character will also have a percentage attached to each stat which determines the likelihood of a stat being increased upon levelling up. This is called a Growth Rate. When a character levels up, an RNG roll will occur against their growth rate, to determine if a character’s stat increases or not.

If a character does successfully stat-up. The RNG roll will occur again to determine if the same stat increases by more than one. However, this second roll is against the Growth Rate / 10.

Below is an example character with their base stats and growth rates explained.

Graphical user interface, application

Description automatically generated

Taking a look at the Wounds stat on Examplius here. The growth rate of his Wound Stat is at 80%. So upon levelling up, Examplius has an 80% chance of his wound stat increasing by 1. If this value does increase, the Growth Rate is rolled again – divided by 10%. So the chance of his Wound Stat increasing a second time gets rolled at a 8%.

This allows us to create a varied cast of characters with interesting Base Stats and Growth Rates.

**Classes**

Classes are going to be used to differentiate between different characters. These will determine the weapons they can equip as well as what can be expected from their stats. While each character should have different Base Stats and Growths, the player should be able to expect similar things from two characters of the same class.

There are going to be two types of classes in the game. Base Classes and Promoted Classes. It’s likely that the playable characters and the enemy characters will mostly feature different classes.

I’ll start with a list of base classes available to playable characters.

Lieutenant

* A unique class available only to the “main character”. Begins with average base stats, but has high growth rates, evenly distributed.
* Can choose to equip most weapons in the game. Though this is subject to balancing.

Ordo Xenos Inquisitor

* Another unique character. Has access to single handed weapons and psychic powers.
* Begins the game with lower than average base stats, but also has high growth rates.
* Stat distribution likely to be different to Lieutenant. Unevenly distributed focussing on damage and utility.

Librarian

* Librarians will have access to psychic powers as soon as they are available to play.
* Librarians will generally be equipped for melee combat.
* Lower than average Strength and Toughness. Focus on Psychic damage

Apothecary

* A healer-type character with minimal weapon options.
* During their turn Apothecaries can perform a healing action on an adjacent character, instead of attacking.
* Limited equipment, must always equip narthecarium

Standard Bearer

* Instead of attacking, the Standard Bearer can rally a nearby character. Rallying will allow a character who has already moved and/or attacked to get another turn
* This will either be a unique character or turn in to a piece of equipment for another character class.

Tactical Marine

* Tactical marines specialise in using ranged weapons. Will likely differ quite a lot between marines due to their growths.
* Will mostly be locked to using ranged weapons. But may also be able to equip themselves with a chainswords and pistols.

Assault Marine

* Perhaps the going to be the standard for player characters in this game. They will generally equip only melee weapons and pistols.
* May equip/unequip a jump pack before the game begins. Jump packs allow Assault Marines to cross impassable terrain, but makes them more vulnerable to ranged weapons.

Devastator Marine

* Similar to a tactical marine, but locked to using ranged weaponry. Has access to heavy weapons.

Biker

* Has a movement value of 8.
* Equipped with ranged weapons and melee weapons.
* Can not take special ranged or melee weapons.

Terminator

* High Wounds and Toughness, low initiative.
* Has a movement value of 5.
* Has a limited selection of weapon options, but generally very strong.

**Promotion**

As mentioned previously. Characters will be able to promote to a new class when certain conditions are met. While each character has a maximum level of 20, promotion may begin as early as level 10. When a character promotes, their level returns to 1, but their Stats immediately increase and their stat growths are modified.

This means that the player can deliberately hold off on promoting a character in order to get their base class to level 20, and then promote that character back to level 1, in order to raise their level up to 20 again.

Each character will be required to use an item to promote to their next class. Some characters may have the option to promote to one of two classes.

Promoted units are yet to be determined until each character and it’s base class have been selected.

**Special Promotion**

I would like to include some special conditions for characters in order to unlock unique promotions. This will also be determined at a later date.

**Weapons Stats**

Each character has two weapon slots in order to equip themselves with a combination of weapons.  
The game will focus on characters either equipping melee weapons & side-arms or two-handed range weapons.

*The context of these stats is explained in the next section, regarding combat.*

Below are the weapon stats

* Range
  + The range of the weapons equipped
  + Melee weapons and pistols generally have a 1 tile range
  + Typical range weapons have a 2 tile range
  + Typical range weapons will receive a debuff to their hit rate when within 1 tiles range
* Hit
  + Used to calculate chance of a character hitting in combat
  + The hit value of each weapon with a range of 0 to 100
  + Typical hit range of a weapon will be about 60 to 70
* Damage
  + The damage value of the weapon
  + Used to calculate Final Damage in combat
* Weight
  + How heavy the weapon his
  + Used in determining how many attacks the character gets
* Ability
  + Many weapons will have abilities. These are not always buffs.

**Weapon Balancing**

This will be something that will likely expand as the game gets developed.   
As mentioned above. I think it’s important that ranged weapons will need to receive a debuff to their hit rate when within 1 tiles range.

**Weapon Types:**

Characters will have a multitude of different weapons that are available to them. These weapons will be categorised into different weapon types. Each Weapon Type will have a property associated to it, and the game will support different levels of weapons within each Weapon Type.

For example, the “Sword” weapon type will be associated with a high hit rate and speed. A Chainsword would be a Level 1 sword, whereas a Power Sword would be considered a Level 2 weapon, with greater stats.

**Equipping and Proficiency**

A character’s class will determine what type of weapon it can uses. While their Proficiency will determine what level of weapon they can equip. There should be 5 levels of Proficiency that are available, with 1 being the most basic and 5 being the most advance.

Every time a character uses a weapon in combat, the usage of that weapon will go towards improving that character’s Proficiency in that weapon type.

For instance, a character may be able to equip a sword or a boltgun. Each weapon would begin at proficiency level 1. If the player decides to only equip this character with a boltgun, as they use the boltgun the proficiency will eventually level up to 2. While the proficiency for the sword will remain at 1.

Each time a characters Proficiency levels up, the amount of times they have to use the same weapon to get to the next level will increase.

For example, a character may have to use a level 1 weapon 20 times before their proficiency with that weapon type levels up to level 2. But now that same character must use their weapon 30 times before their proficiency level is raised to 3.

*I’m hesitant to commit to exactly how much it will take to level up Proficiency until it’s necessary to balance.*

**Pistol Proficiency**

Pistols will only be equipped alongside melee weapons. An pistol will have a proficiency level in order to equip it, but the characters themselves wont have a proficiency stat for any pistols. They will simply use the proficiency value of their equipped melee weapon in order to equip a pistol.

**Initial weapons list**

Here’s a rough layout of different weapon types. Absolutely subject to change, but it’s a good start.  
It’s very likely that there will be multiple different weapons for each level, rather than simply one weapon of each type per level.

| Level/Type | Sword | Axe | Gloves | Rifle | Special | Heavy | Pistol |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Chainsword | Chain Axe | Digital Weapons | Bolt Gun | Storm Bolter | Heavy Bolter | Bolt Pistol |
| 2 | Power Sword | Power Axe | Power Fist | Stalker Bolter | Flamer | Heavy Flamer | Flame Pistol |
| 3 | Master Crafted Power Sword | Master Crafted Power Axe | Chain Fist | Master Crafted Boltgun | Plasma Gun | Autocannon | Plasma Pistol |
| 4 | Relic Blade | Thunder Hammer | Lightning Claw | Helfire Rounds | Gravity Gun | Lascannon | Grav Pistol |
| 5 | Relic Sword | Relic Thunder Hammer | Pair Lightning Claws | Relic Boltgun | Melta Gun | Multi-Melta | Relic Pistol |

**Combat Stats**

Combat is initiated when one character comes into engagement range of another.

On the players turn, before combat is initiated, the player can see the Combat Stats of the attacking character and the defending character.

Combat stats are the final calculation of the Attacking characters stats plus any modifiers, against the defending characters stats plus any modifiers.

* Hit Chance
  + % out of 100 Chance of the attacking hitting the enemy
  + Calculate from Weapon Hit Rate + Weapon Skill + (Leadership / 2)
* Attacks
  + How many attacks a character gets per turn
  + Calculated from finding the Speed of the Attacker: (Attackers Initiative – Weapon Weight)
  + And finding the Speed of the Defender: (Defenders Initiative – Weapon Weight)
  + The game then compares the Speed stats to see if anyone’s speed is 4 points greater than the opposing characters speed
  + (Attackers Initiative – Weapon Weight) (Defenders Initiative – Weapon Weight) ≥ 4
  + If one character has a greater speed by 4, that character gets to make a second attack.
* Final Damage
  + Mentioned in previous section. This is the total attacking characters damage, minus the defending characters defence
  + Calculated from (Attacker’s Strength + Weapon Strength) – (Defender’s Toughness + Environment Modifiers)
* Critical Hit
  + % out of 100 Chance of a critical hit
  + Calculated from ((Weapon Skill + Leadership) / 2)
* Critical damage
  + The damage value of a critical hit
  + Calculate from ((Attacker’s Strength + Weapon Strength) \*3) – (Defender’s Toughness + Environment Modifiers)

**Attack Order**

The attacking character always attacks first, followed by the defending character.   
If either character gains a second attack, this happens after both characters have made their first attack.

**Battle screen:**

Whenever a player or enemy begins an attack, a transition ought to occur which displays the battleground between the two foes. On the left is always the attacked, on the right is always the defender.

Characters will perform an attack animation. As the animation connects, the damage is reduced from the opposing players wounds.

Table

Description automatically generated

**Tiles:**

Game will be played on maps featuring a square tile set for movement and combat.  
Each map tile ought to be 128x128 in size.  
Background pattern

Description automatically generated

We should assume that not all playable maps are going to fill the screen. So each playable tile should have an outline to indicate to the player that this is the playable zone of the map.

Chart

Description automatically generated

**Cursor:**

Player will use a curser to navigate the maps of the game. The curse should be represented by a semi-transparent boarder with an arrow.

Shape, square

Description automatically generated

**Map Movement:**

When a character has been selected been selected by the player, their movement tiles should be displayed. The player can cancel selection of a character at any time with the cancel button.  
When a character is selected, their movement zone should be highlighted in Blue, and their maximum attack range should be highlighted in Red. A character may move anywhere highlighted in the blue area and can attack from anywhere within it. Typically, a character will have an attack range of one square either horizontally or vertically.

The movement range should adjust to fit the playable area which the character can move within. Is an area is blocked by an obstruction or wall, the movement area should fit accordingly.

Below is an example of a character with a movement range of 6 and an attack range of 1.

Chart

Description automatically generated

When the player has selected a character to move, an arrow should be drawn from the character, attached to the cursor.

Shape

Description automatically generated

As the player moves the curse, the arrow should stretch and bend, following the movement of the cursor.

Chart, histogram

Description automatically generated

If the player moves the curser move times than the character can move. The arrow must snap to fit the characters movement value. Below are two examples of how the arrow should behave, if the player moves the cursor two square right, one down, three right, and one up. The first example is incorrect, as the character on has a movement of 6.

As the players cursor moves on the square 7 the arrow should snap according the second image below.

A picture containing text, shoji, crossword puzzle

Description automatically generated

A picture containing shoji, green, bright, cabinet

Description automatically generated

**Special tiles:**

Each map should include special tiles in order to introduce new gameplay elements for the player to strategize around. These tiles will have special properties.

* Light cover (e.g woods, improvised barricades, ruins)
  + Light cover tiles reduce a character’s movement by 1
  + When in light cover combat avoidance chance improves by 10%
  + When in light cover combat defence stat improves by 1
* Heavy cover (e.g Bastion, Bunker, Hillside)
  + Heavy cover tiles reduce a character’s movement by 2
  + When in heavy cover combat avoidance chance improves by 20%
  + When in heavy cover combat defence stat improves by 2
* Shallow water
  + Reduces character movement to 1. A character must be adjacent to shallow water in order to attempt to cross over.
  + Reduces by attacking and defending characters hit chance by 10%
* Deep water
  + Totally impassable
* Bridge
  + Tile used to cross water
  + Some bridges may already by down, others may require a key
* Mountain
  + Normally impassable unless character has a jump pack
  + When stood on mountain tile, receives benefit of light cover
* Walls
  + Completely blocks movement and combat line of sight, unless character has jump pack
* Gate
  + Blocks character from passing unless opened with a key. Typically situated between walls.
* Ancient Reliquary
  + A treasure chest containing an item. Requires a key to unlock. Does not affect movement or combat.
* Requisition Relay
  + Equivalent to a shop. Player may spend requisition in order to purchase equipment.
  + Behaves the same as Heavy Cover

Here is an example stage featuring some of the special tiles listed above, with a character which has a movement value of 6.

Lc = Light Cover

Hc = Heavy Cover

Sw = Shallow Water

Dw = Deep Water

Br = Bridge

Mt = Mountain

Chart, treemap chart

Description automatically generated

**Premise and plot**

*So I’m going to pen a rough plot and premise. I had this idea first, and designed the gameplay and features around it. It basically contextualises the game made up of individual characters with customisable equipment. I’m happy to change much of the general plot and characters etc. My personal philosophy is to design by context, so I had to create a setting first in order to design around it.*

Set shortly after the Horus Heresy, not long after the setup of the Deathwatch.

The game follows a unit of Blackshields in assistance to an Ordo Xenos inquisitor, tasked with investigating an old planet which has regained contact with the Imperium.

The planet was not lost in the warp but is on the edge of the galaxy, blocked by warp storm which had disrupted communications for nearly 100 years.

Ruling the planet is a Governor, a former Imperial Fists captain. He was on a diplomatic mission as an Imperial Regent before communications were cut-off, but has since adopted total governance.

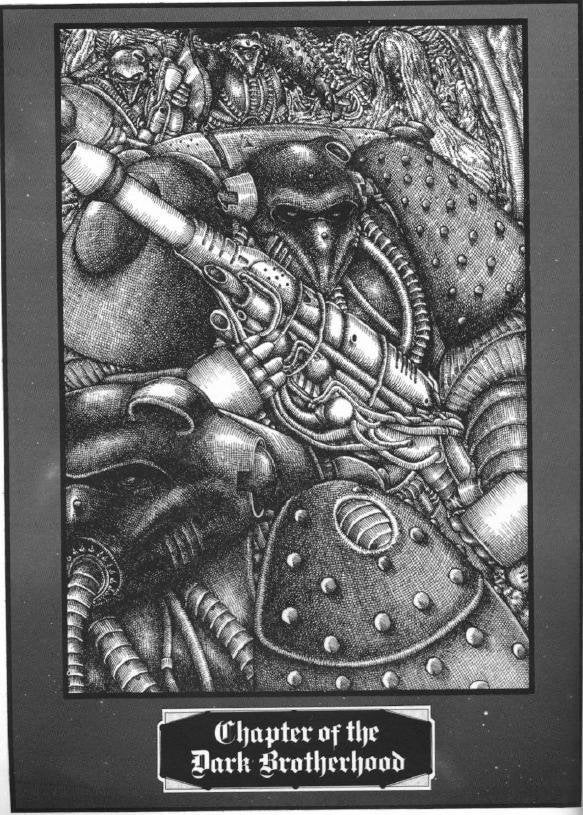
His planet is not yet plunged into total war, but is being threatened by both a local Ork WAAGH as well as two opposing factions of Eldar Corsairs who use it as a Colosseum for their rivalry.

The player must assist the Governor in thinning out the Ork population and ridding the planet of the Eldar Corsairs. Unfortunately, the Governor is bitter about the fact that he is being assisted by Blackshields. Towards the end of the game, the Governor turns on the Blackshields in order to destroy them. The governor is gradually corrupted by chaos, resulting in a small warband of Chaos Space Marines arriving on the planet to claim it as their own.

*Contextually I like the idea of the Deathwatch, as it opens up the gameplay to having character abilities which reflect their parent Legion. As for them being Blackshields, I think it would be good for the characters in that we can develop a dialogue system which leads in to non-linear class progression.*

*For instance one player may learn that Character A was actually a disgraced Blood Angel, allowing character A to promote to a Death Company class. However another player following a different dialogue tree may actually learn that Character A wasn’t a Blood Angel, but instead a World Eater. So instead of Character A promoting into a Death Company marine, he could promote in to a Berzerker.*

**Approach and Style**A picture containing automaton

Description automatically generated

*So I’ve got a bit of a “marmite” idea for the concept. I think it would be good to use 1st-3rd edition 40k as the setting for this game. In Rogue Trader, for example, Space Marines could trade with aliens and equip Xeno technology such as Shuriken Catapults and Neuro Disruptors. I think it would be a really cool premise if these Radical Deathwatch Marines bartered with the local Xenos for weapons. This would also allow the player to potentially recruit an Ork Mercenary or a Corsair Outcast in to their army.*

*I think the visual style would do well to reflect that. Epitomising some old 40k and John-Blanche artwork. I’m picturing the cast mostly in Mk VI armour, with Beakie Helmets and a full-visor.*

*I’m not so much a fan of the current 40k aesthetic and style, where Space Marines are these super-professional military. I much prefer the rough and ready types of marines who basically think they can say and do anything. I think it opens them up to a bit more humanity and allows them to break the rules a little more.*

*I understand that not a lot of people are in to 40k for this, so if it doesn’t interest any of you, that’s fine.*