Planetary Control

Game Design Document V2

Team Saber

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Rationale and outcomes for Prototype 1:
- **What design questions you have intended to answer with this prototype**
  - Which gameplay mode is easier for players to control the units?
  - Is it smooth to change between gameplay modes?
  - What action might not be intuitive for players to do during both gameplay modes?
  - How does this game balance between both players?
- **What types of prototype have been built and why (It could be one prototype but built with components to test on Mechanics, Kinesthetics, Technology**
  - We've built a prototype that allows the player to experience both gameplay modes. The player will be able to place the unit on their field in the isometric mode, then they will be taken to the third-person shooting mode. In this mode, they can control the unit they just selected to move and jump, and do shooting by left-clicking.
- **How are those intended questions are clarified with the current prototype (what works and what doesn't)**
  - This prototype can help us test the following questions:
    - Which gameplay mode is easier for players to control the units? Isometric gameplay mode can help players to view the game world and apply the strategy based on the map. And the third-person shooting mode is easier for players to control the units to attack and hide.
    - Is it smooth to change between gameplay modes? The gameplay mode is changed automatically without any warning, which confuses some of the players during the testing. We are suggested to include some transitions, like a text bubble on screen or simple animation, between the two gameplay modes.
    - What action might not be intuitive for players to do during both gameplay modes? (partially) For some of the testers who are not very familiar with third-person shooting games, they feel the shooting aim point in the middle of the screen is not very intuitive because they can also see the mouse arrow. And when they are clicking to shoot, they are a little confused about which one will be the target shooting direction.
  - Not clarified yet:
    - How does this game balance between both players? Since we are not implementing the multi-player server yet, we cannot test the game balancing of two players.

- **Any unexpected outcomes? Does it mean a new gameplay experience to include as a feature or a problem to resolve?**
  - Player decided to run away from the target and just explore. Perhaps this is an opportunity to add secrets in the map or areas that are inaccessible unless you figure out how to get there. It is a bit different from the competitive game we were planning on but it is a possibility.

- Using NavMesh as the basis for our isometric movement system means the player can move around a lot more freely than the grid based system we were planning on using. This means we will need to adjust our original ideas for balancing with this more free-form movement.

- **What further questions should be tested with next prototype?**
  - Are any of the characters too overpowered?
  - Are the third person battles too quick or too slow?
  - Is the map too big or too small for the isometric gameplay as well as the third person shooter gameplay?
  - Is there one dominant strategy that is being abused?
  - How many characters is optimal for the isometric strategy gameplay?
  - What would be the economics system?

Design refinements as per internal review
- Some of the models we have built in the first two weeks are not low-poly enough and different models did not look consistent. We refined our design by setting a standard on how many numbers of surfaces we keep for a certain shape.
- We decided to reuse same skeletons on all eleven units so that we can save up a lot of time on animation and 3D-modelling.
- We decided not to interior design the buildings at the current time.
- We were able to figure out through tutorials on how to implement controllers for our character animations which allowed for smoother and more practical animation.
- The weapons were also made separate from the character models to allow for attack implementations in unity by our programmers.
- For the environment we were able to capture the low poly sci-fi look that we were going in assets such as fences, energy tanks, and vehicles.
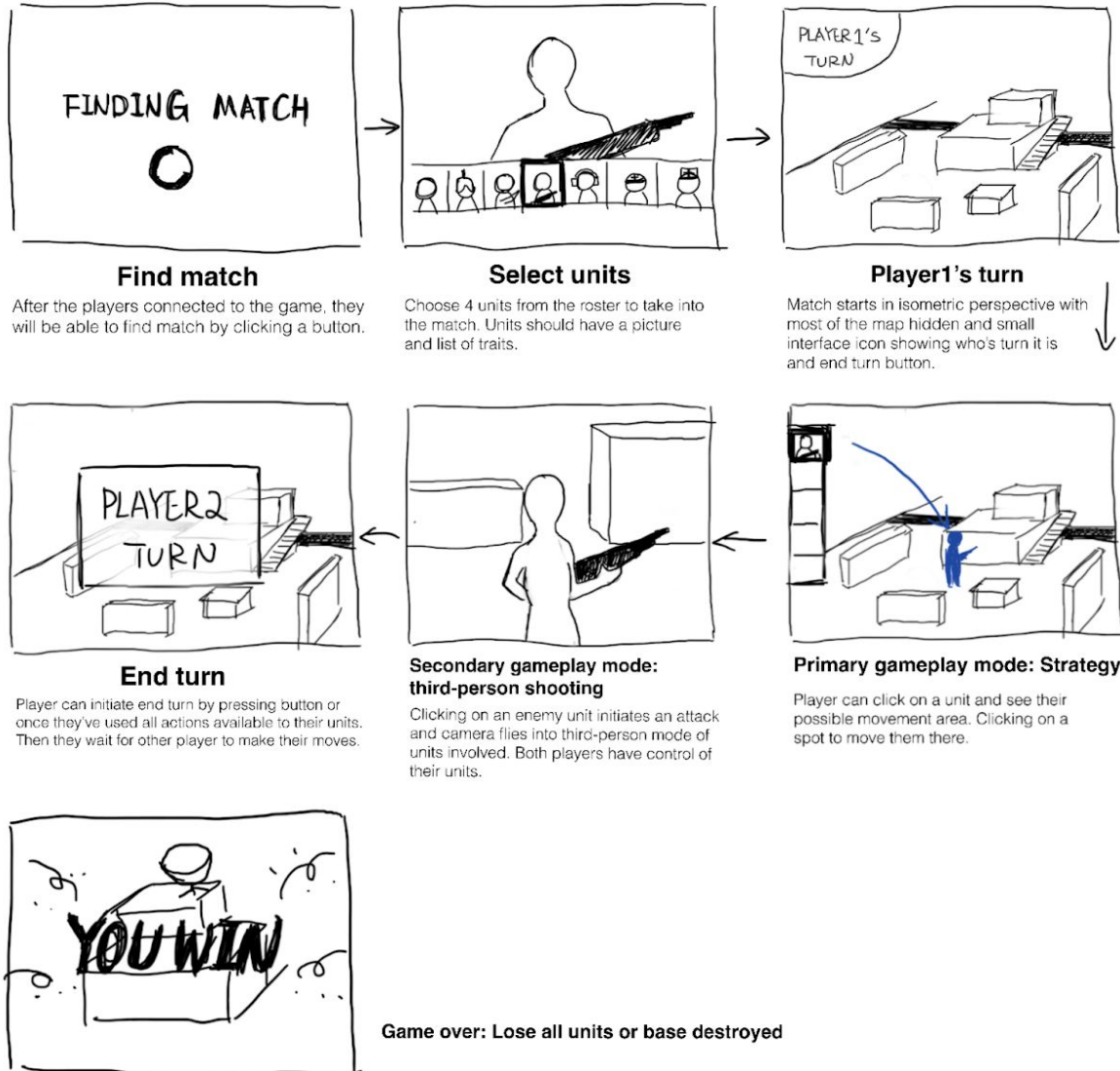
Design refinements based on playtesting feedbacks and analyses
- The transition between isometric and third-person shooting mode is too sudden without any explanation. We may include a transition animation/interface such as a countdown animation to tell the players battle is about to commence.
- Since our game is a little complex between different gameplay modes, we may need a simple tutorial to walk players through the game core loop.
- It's not immediately clear how much damage is being dealt and how much health remains. In future iterations the UI will require health bars and other information based on characters. Also need to think about UI transition during perspective transition.
- The combat in 3rd person mode could use more tactic as well, consider adding crouching, sprinting, or character abilities.

Reflection on your learning experiences with prototyping & playtesting, including designer's experience to work with Prefab to facilitate design, whether it is helpful with the design work
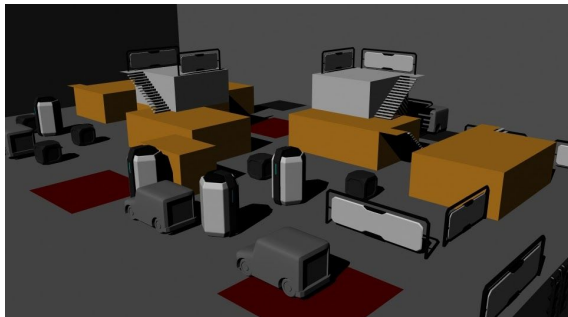
- It's important to measure the game map first and confirm them dimensions of each building block, then make them in high-details with texture in Maya. So for the first prototype, we decided to use simple character figures and cubes to test the position and attacking/blocking function. Or it might be hard to make changes in the late stage.
- Networking and functionality made testing a lot more difficult, but we believe getting it in now would save a lot of headaches in the future. Just transitioning existing code to networked code introduced problems that did not have a quick fix.
- Prefab value adjustments are very handy for testing simple values like movement range, jump height, move speed, weapon range, etc. Being able to edit them while the game is running can allow for rapid testing of different values.It is ideal for balancing the game.

Refined flowboard:

Find match

After the players connected to the game, they will be able to find match by clicking a button.

Select units

Choose 4 units from the roster to take into the match. Units should have a picture and list of traits.

Player1's turn

Match starts in isometric perspective with most of the map hidden and small interface icon showing who's turn it is and end turn button.

End turn

Player can initiate end turn by pressing button or once they've used all actions available to their units. Then they wait for other player to make their moves.

Secondary gameplay mode: third-person shooting

Clicking on an enemy unit initiates an attack and camera flies into third-person mode of units involved. Both players have control of their units.

Primary gameplay mode: Strategy

Player can click on a unit and see their possible movement area. Clicking on a spot to move them there.

Game over: Lose all units or base destroyed

Primary Gameplay Mode

Perspective: Isometric

Interaction Model: Multipresent

Primary gameplay mode: The primary gameplay mode will be in an isometric perspective. Players will be able to view their ally field and place the ally units on the map. In this way, players can easily check the map and make use of the building blocks and barriers to apply their strategy and arrange the placement of units.
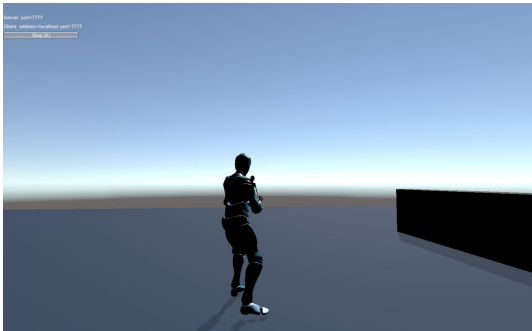

Secondary gameplay mode: The secondary gameplay mode will be in third-person perspective from an over-the-shoulder view. It will be easier for players to control the units to attack and protect. Players will be able to use the arrow keys to move and shoot the enemy units by left-clicking. In this game mode however, the player interaction model is not multipresent, as they are only playing as this one unit until combat is over.

Refined core loop/smart depth diagram:

Core Loop Diagram
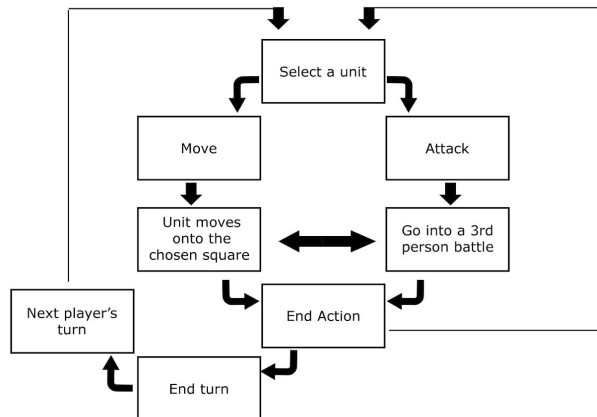
Winning Play: Outmaneuvering the opponent by playing to your chosen character strengths
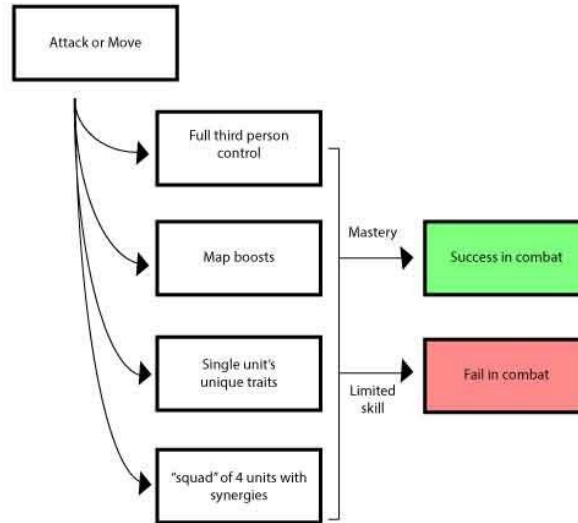
Connection to winning play:

Since certain units fare better in combat than others, it's smarter to engage combat with enemy intel / support units which are typically weaker in combat to compensate for their utility. Learning unit synergies and quirks will make players better at defeating other players units. Boost towers require map knowledge and knowing when to use them

Protagonists and Antagonists
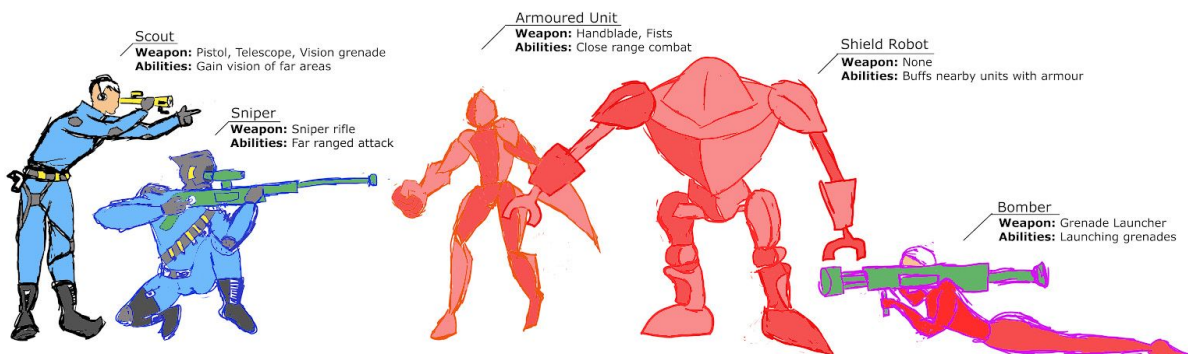
Each player plays as a separate faction denoted by their color. Friendly units will share the same color and enemy units will be in the enemy factions color.
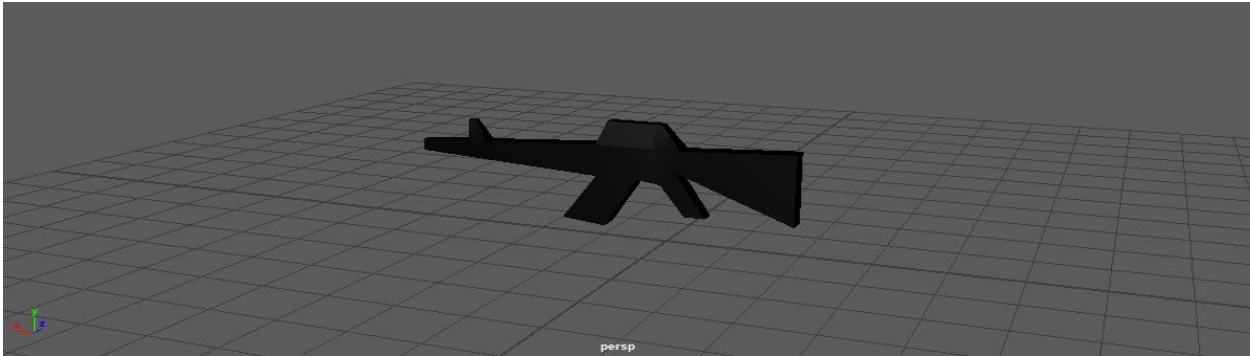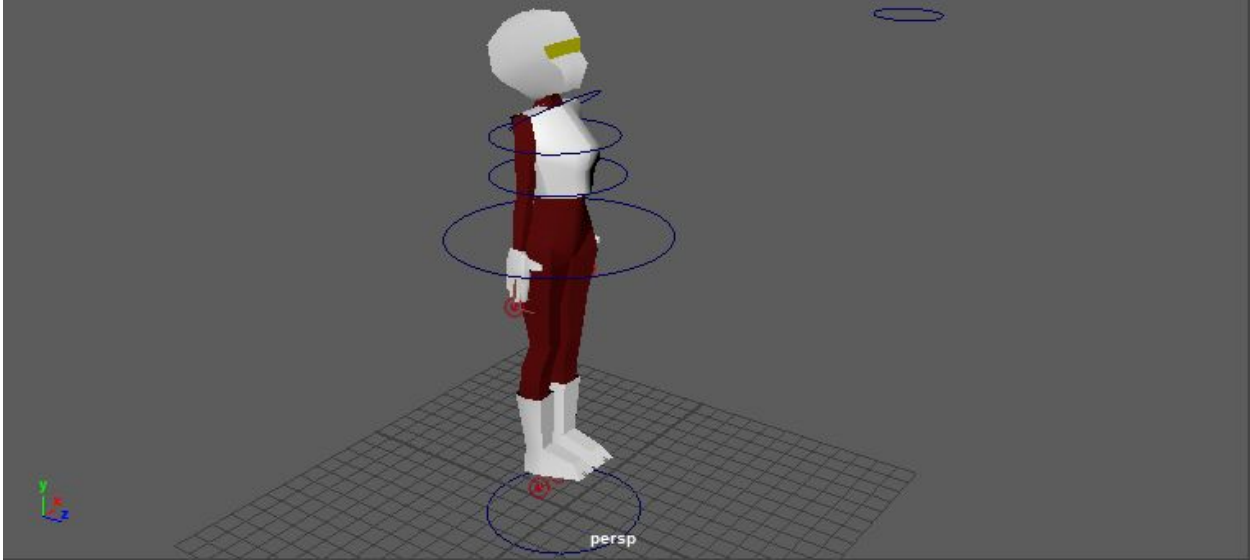
Unit Lore:
- Medic: a middle-aged doctor who has seen too many deaths from the wars and made a conscious choice to do his job and save soldiers in their critical time of need: on the battlefield.
- Soldier: a 23-year-old female that graduated in the top class of the planetary recruit center. She is skilled in medium-ranged combat as her primary weapon is an assault rifle.
- Scout: with an expertise in perception, the scout dedicated his life to providing intel for his faction to save lives by preventing sneak attacks and setting up battles.
- Trapper: Tired of the war desecrating his wild hunting grounds, he decides to join the war, hunting and trapping the offending enemy soldiers instead.
- Armored: A beefy robot programmed to replace frontlines in an effort to reduce human casualties. During the design process, a need for tankiness outweighed its need for mobility, rendering the robot strong but slow.
- Shield robot: A robot programmed to support other units on the battlefield. Its primary utility is to provide shielding and mobility to other units, making other units take less damage and move further than they would on their own.
- Paladin: a brawny and virtuous man beloved by his town, he decided to enlist to protect those who would defend his countrymen.
- Jammer: an ex-government signal intelligence unit, he can disable and prevent abilities and passives from activating within his range.
- Sniper: a 23-year old female that graduated in the same class as the soldier in the top class of the planetary recruit center. However, she focused her studies solely on sniping. She is skilled in long-range combat and her primary weapon is a sniper rifle that was passed down by her deceased father.
- Bomber: not the sharpest shooter graduating from the planetary recruit center, but explosives don't miss.
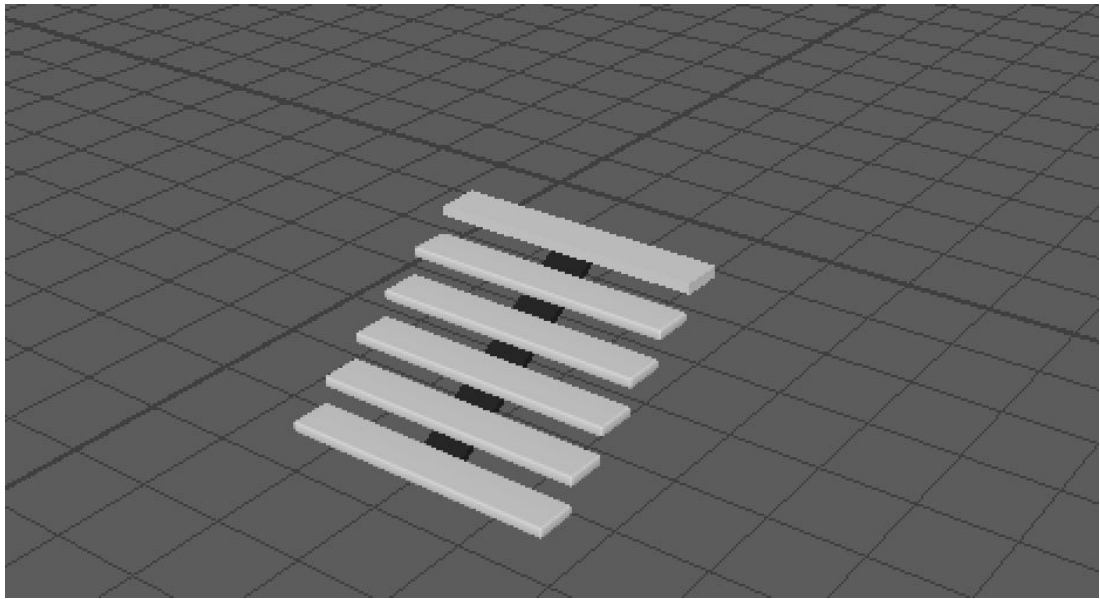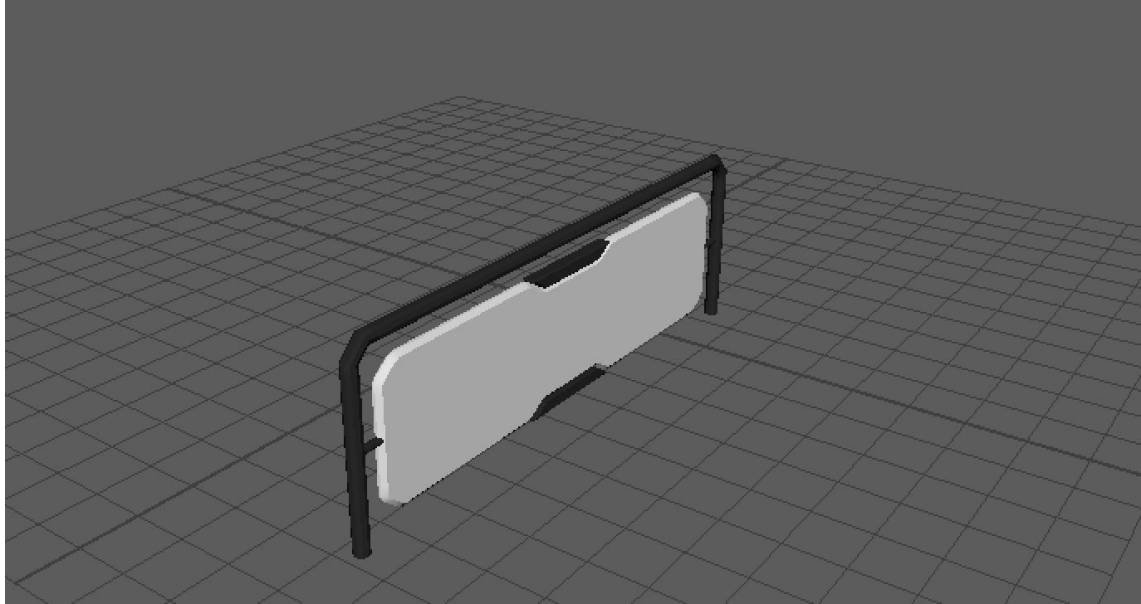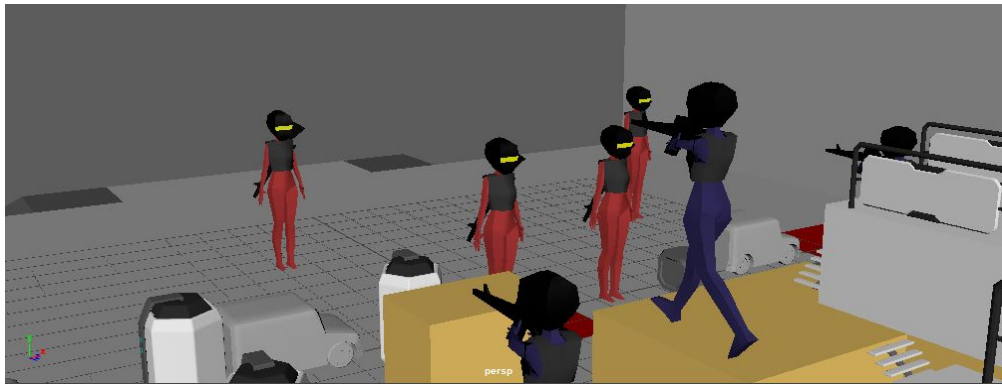
Story and Narrative Flowboard

Backstory:

In the future, human-beings are conducting colonization operations in the solar system. Important resources are limited on each planet, so different factions are fighting for control over more colonies. Because of the high rate of resource consumption, factions have setup armies, with skilled combatant squads of four, for their efforts. Mars is the start of the planetary control wars. Each faction has sent their most highly equipped squad to seize control over the existing infrastructure.

Design Art

References:

Xcom :
https://images.app.goo.gl/BgG4G1VnzNBt2xYBA
https://images.app.goo.gl/3PHvS2gxKtmXKnLn7
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Civ 5:
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Fortnite:
https://images.app.goo.gl/mbUbV1UpZFW4LEL76

Overwatch:
https://images.app.goo.gl/gDqSX4ThoisdrrwP6
https://images.app.goo.gl/yLic8oLV2LJXDsu88

Focusing on the isometric part first and ai, level design.
How does the unit working without playing?
Change back to isometric by themselves.
Apex
Halo wars 2 champions