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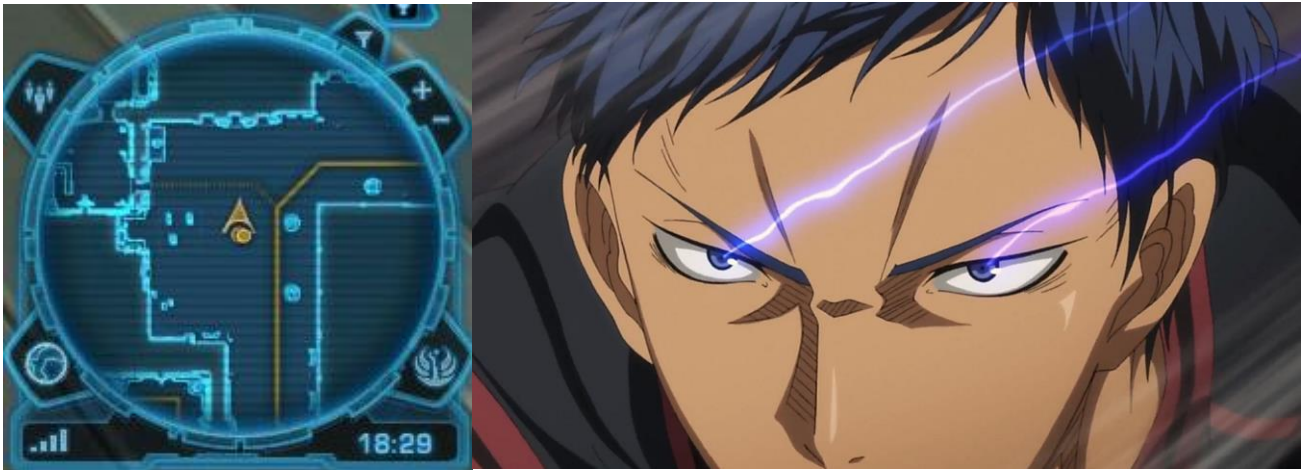
# Atomic Defenders of Earth

Games Design and Technical  
Specification Document

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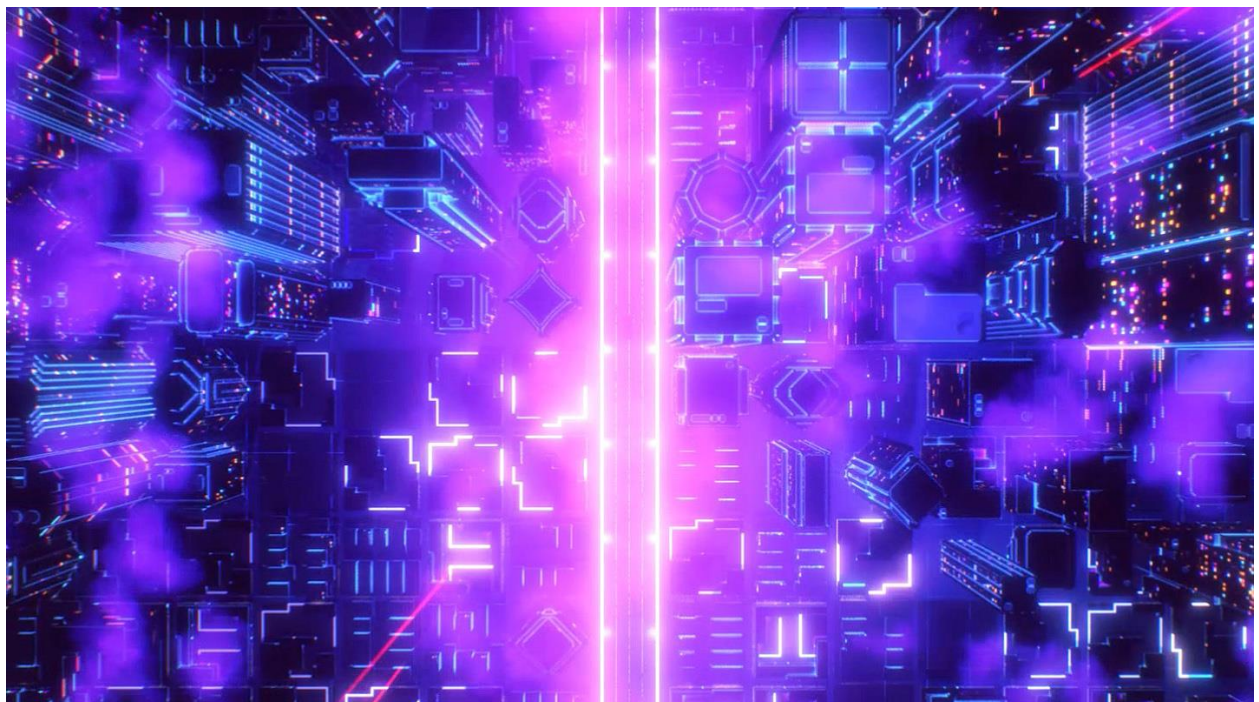
## **Executive Summary**

I will be making a top-down shooting game. It will be played on a big circular map. Different enemies will be spawned on different areas on the map. There will be around 10-15 levels. The core of the game will be the player's mechanics to dodge and kite the enemies to win. Only its wings can be upgraded to make it easier to dodge and to have a special effect. The fun will be had in dodging abilities, kiting, blocking and surviving.



## **Style & Theme**

My theme will be futuristic neon space. The setting will be in space with advanced machines and gadgets. These will be futuristic by applying neon styles with art associated with the synthwave, retrowave and futurewave genre of the 80s. Some special movement effects will be gotten from the anime: Kuroko no Basuke. These effects include the movement effects shown when players are in the zone.



## **Story – The Lore**

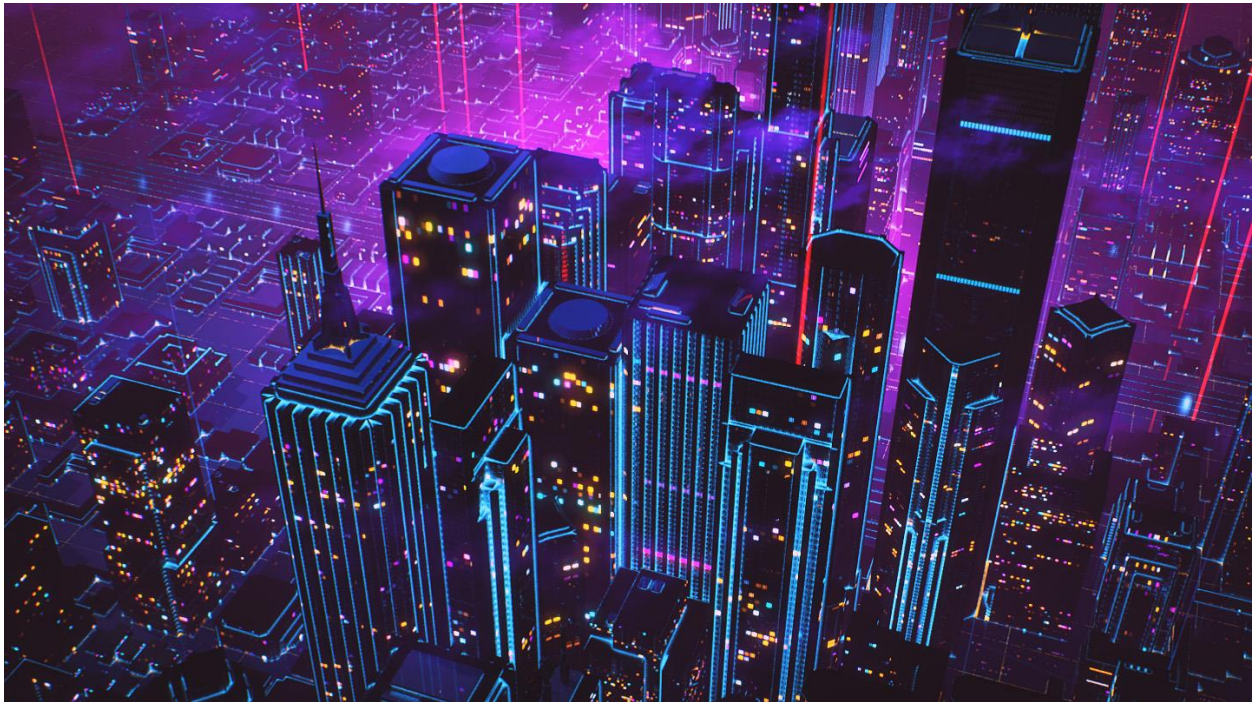
We are currently in the year 2160, the future of earth. Earth has evolved, but so has the rest of the planets in the galaxy. They have all obtained power, but having so much power requires a huge amount of resources. Earth is one of the planets that still has many resources. Many planets are planning to attack Earth, some have even joined forces.

Not only planets have evolved, but also atoms have evolved, especially atoms around Earth. Being small and being many, atoms have communicated this message to atoms of Earth. In preparation for these upcoming battles, atoms of Earth have put a barrier connecting to their life around Earth. In order to destroy these barriers, the atoms must be destroyed.

The battle has lasted 5 years. The planets are winning. There is only 1 atom of Earth left. Only 1 barrier. When everything seemed lost, it evolved.

This is you (player). The rest of the atoms have sacrificed their life to buy the time for you to evolve. Protect Earth. Protect your barrier. Protect yourself... at all costs!

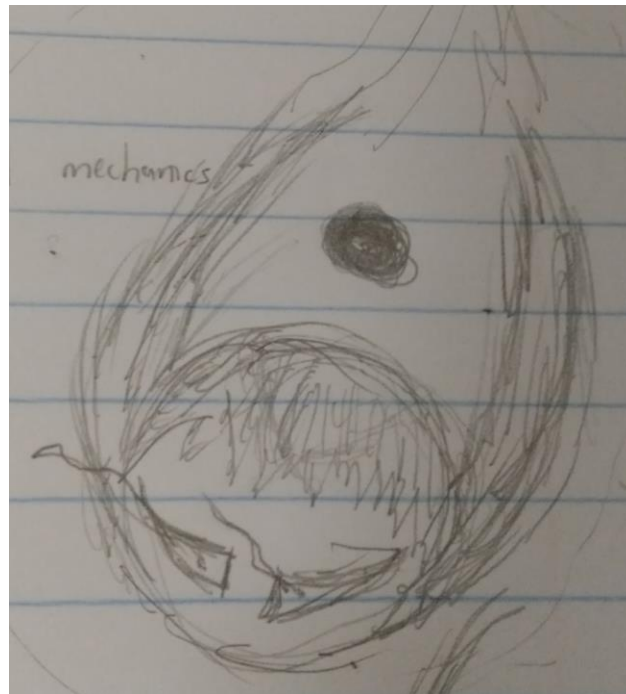
Later on while defending Earth, the atom finds rings that become his pet to help defend Earth.





## Collision Detection

The collisions will be between the skillshots and autoattacks of enemies and the atom. The atom and enemies cannot move past each other, if they are about to touch, the enemy will not move, but the atom will find an alternative way to get to reach its destination. Collision detection must be fast and accurate. This game is about the player's mechanics to play the game to survive, the slightest mistake will result in the atom taking lethal damage. The player can also block autoattacks, but cannot block spells. These blocks only last a fraction of a second, and if not timed properly, will miss blocking the autoattack.



## Game Features

These game features will revolve around making the player's experience of his/her mechanics of dodging, blocking and kiting fun and rewarding. The main challenge of the game is reaching the end of the game – level 10 or level 15.

- **Multiple levels.**  
10-15 levels. As the level increases, more enemies, more difficult enemies.
- **Multiple wing upgrades.**  
Different movement stats, addition of special effects for moving.
- **A map.**  
Global mini map revealing enemies on lower right of screen.
- **Health packs and speed boosts.**  
Randomly spawn around the map to assist in atom.

- **Different types of enemies.**  
For level difficulty and making survival more challenging.
- **Menu, saving/loading, sound.**  
Menu to do all the administrator stuff, change settings, load game, new game and story.  
Saving/loading to be able to carry on from when you last played. Sound to make the experience more fun and help detect skillshots being fired as well as movement of enemies.
- **Crispy movement effects.**  
Futuristic visual effects to make it fun controlling an evolved atom.
- **Range indicator.**  
This will help kiting enemies.
- Indicators of enemies respawning and skillshots that are instant.  
Making the game more realistic to survive and skillful.
- **More upgrades for weapons and looks**  
Making the game more fun and rewarding.
- **Animation cancelling.**  
Making autoattacks and movement more skillful and mechanically intensive.
- **Blocking autoattacks.**  
Having a better chance of survival, and being able to display more skill.
- **Pet with abilities.**  
Making the game less lonely, and more fun.

## **Artificial Intelligence**

The different enemies must be able to locate the atom, and use its spells and autoattacks to damage the atom. The pet of the atom must follow the atom the whole time. The map will contain walls and obstacles, so movement by both the atom and enemies cannot collide with objects on the map. As the level increases, the game becomes more difficult by:

- Increasing the aim of the enemies. Make it so that they also aim at where the future position of the player is.
- Being able to kite.
- Health and speed of spells increase.