

Kite Away

THE PERFECT GAME TO IMPROVE YOUR SKILLS
HOW LONG CAN YOU LAST

Inspiration

LEAGUE^{OF} LEGENDS



Budget

Budget Then

- ▶ Sketch Pad \$ 10.00
- ▶ Writing Utensils
- ▶ Computer
- ▶ Unity Game Engine
- ▶ Art Assets Budget \$200.00
- ▶ Music Effects Budget \$100.00

- ▶ Total: \$ 310.00

Budget Now

- ▶ Assets Purchased \$ 25.00

- ▶ Total: \$25.00

Resources Used

Resources Planned Then

Computer

Sketch Pad

Writing Utensils

White Board

Dinosaur Plush to Help me

Unity Engine

Assets for the game

VSCode

Resources Used Actual

Computer

Various Udemy Courses

Tablet replaced White Board and Sketch Pad

Dinosaur Plush and Dinosaur Plush friends to Help me

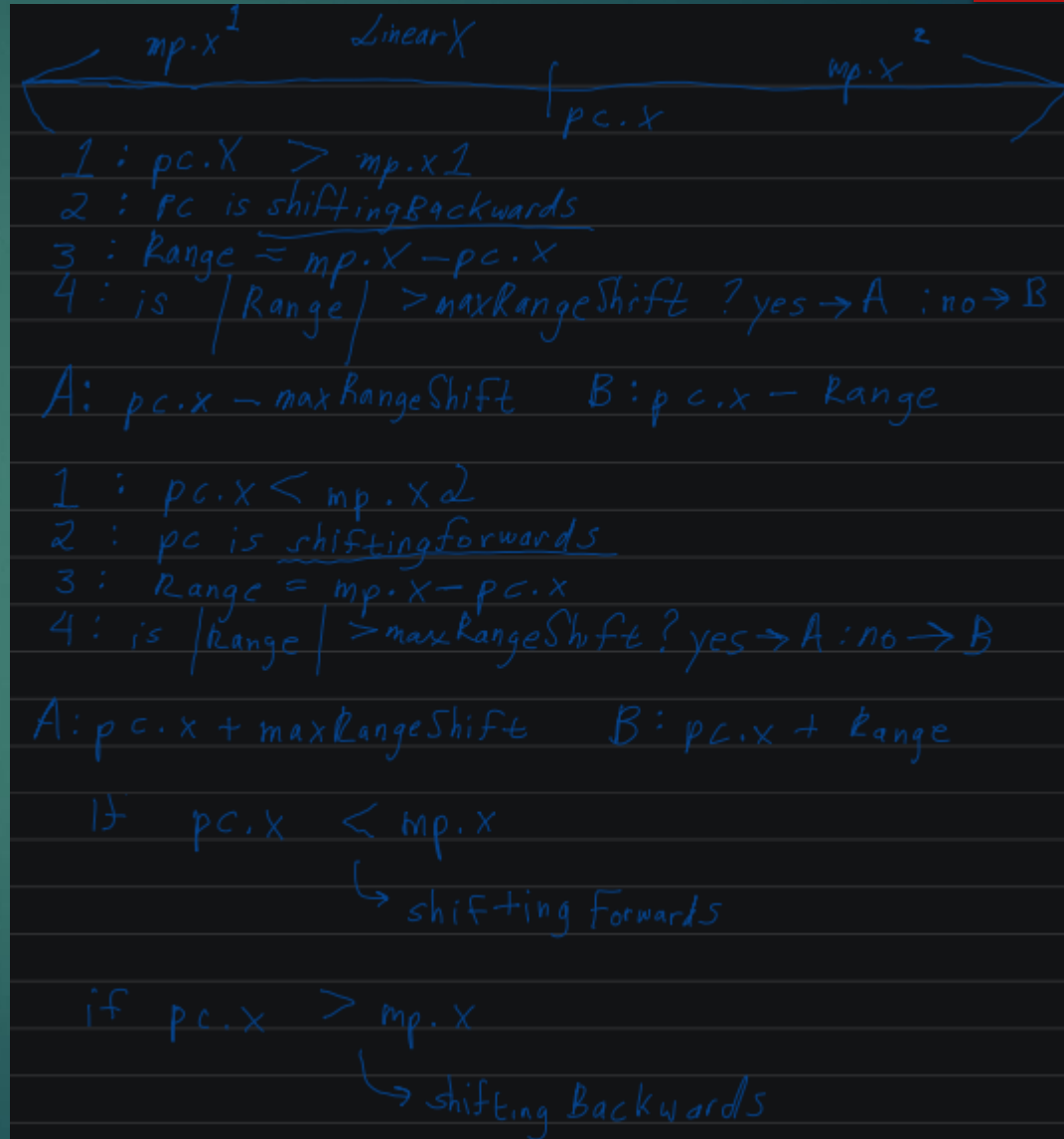
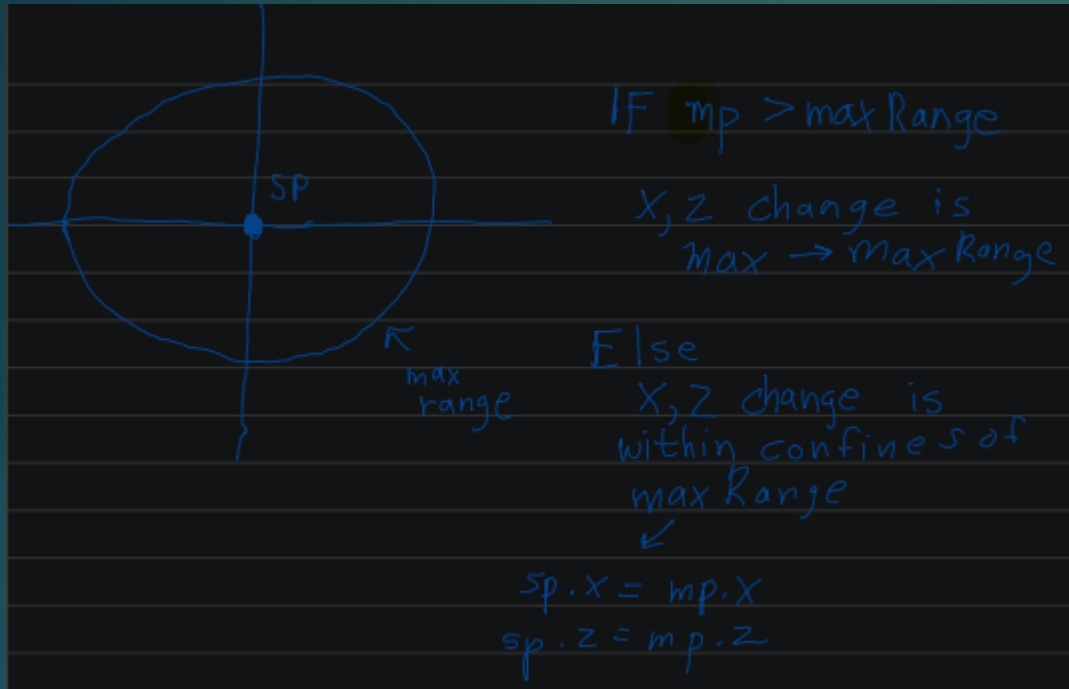
VSCode

Calendar

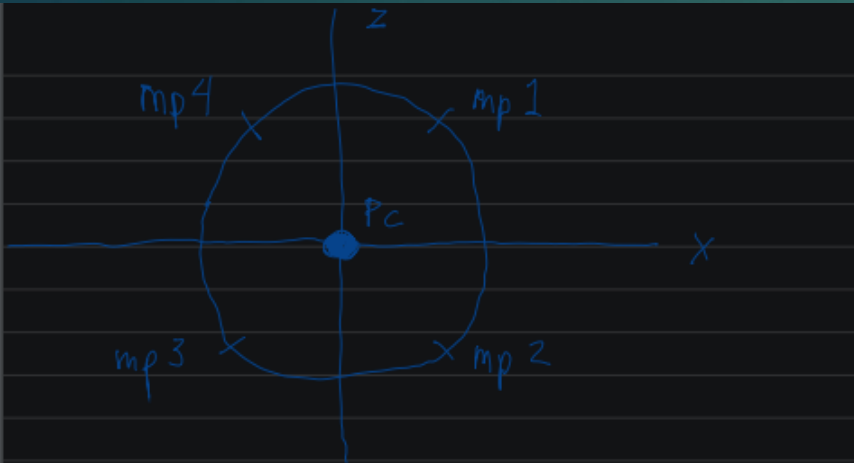


Description	Time Frame Plan	Time Frame Actual
Planning & Outlining	9/21/21 -> 9/30/21	9/21/21 -> Still Ongoing
Programming	9/24/21 -> 11/28/21	9/25/21 -> 12.07.21
Searching & Picking Assets	10/01/21 -> 11/12/21	11/15/21 -> 11/26/21
Finishing Touches	11/26/21 -> 12/13/21	12/01/21 -> Still Ongoing

Creating the Teleportation System



Testing the Logic

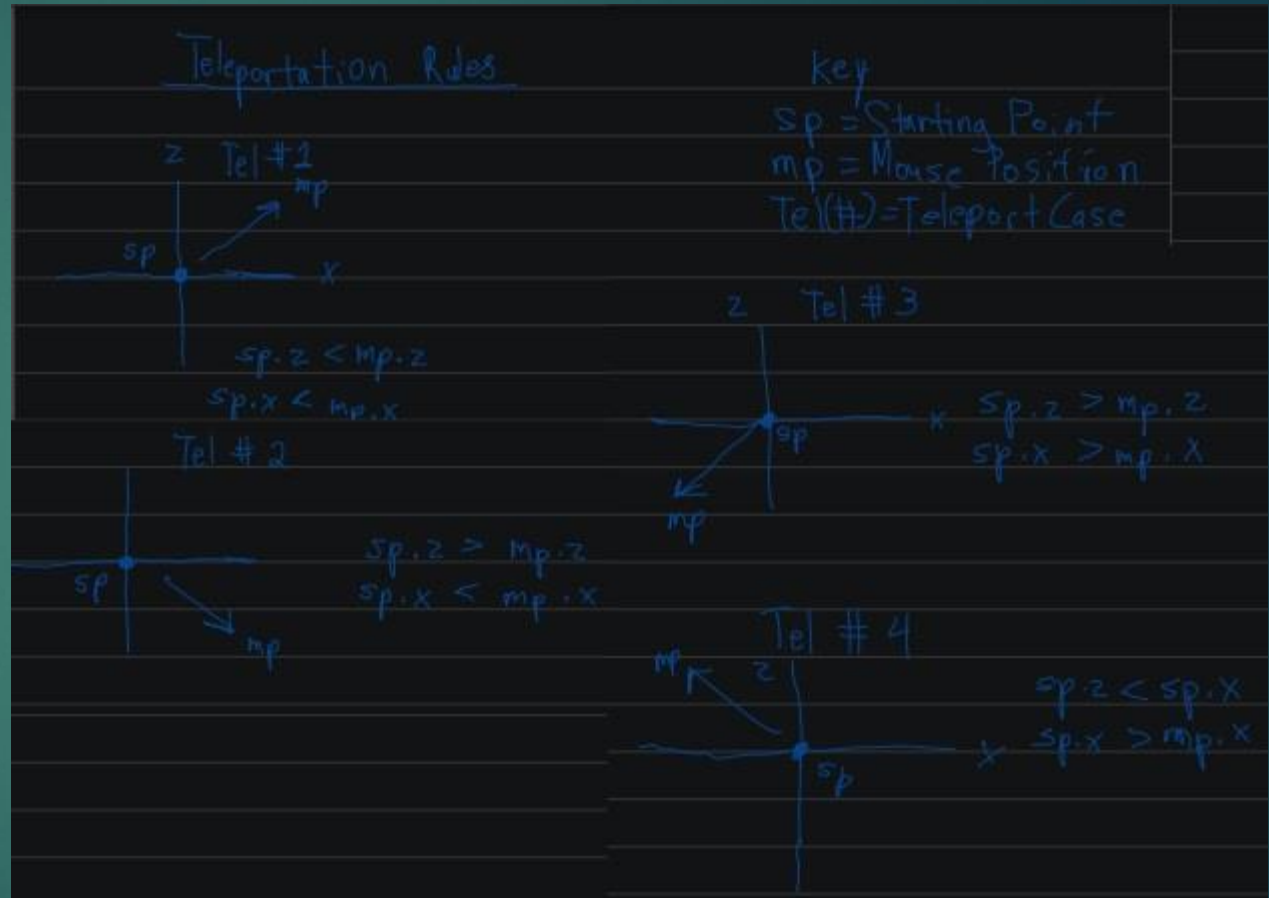


mp 1
x → going Forwards
z → going Up

mp 2
x → going Forwards
z → going Down

mp 3
x → going Backwards
z → going Downwards

mp 4
x → going Backwards
z → going Up



Creating the Teleportation System

Pseudo Code

```
function ChangeInXDuringShift (pC, mP)
```

```
    range = pC.x - mP.x  
    if |range| > maxRange  
        return maxRange  
    else  
        return range
```

```
function ChangeInZDuringShift (pC, mP)
```

```
    range = pC.z - mP.z  
    if |range| > maxRange  
        return maxRange  
    else  
        return range
```

Code

```
public float ChangeInXDuringShift(Vector3 characterLocation, Vector3 shiftDestination) {  
    float rangeOfShiftX = characterLocation.x - shiftDestination.x;  
    if(characterLocation.x > shiftDestination.x){  
        //Debug.Log("We are going Right or forwards" + rangeOfShiftX);  
        return Mathf.Abs(rangeOfShiftX) < maxShiftRange ? Mathf.Abs(rangeOfShiftX) * -1: maxShiftRange * -1;  
    }  
    else{  
        //Debug.Log("We are going Left or backwards" + Mathf.Abs(rangeOfShiftX) + " " + maxShiftRange);  
        return Mathf.Abs(rangeOfShiftX) < maxShiftRange ? Mathf.Abs(rangeOfShiftX): maxShiftRange;  
    }  
}  
  
// Calculates the change in X and Z to move the character correctly based on player's desired location  
1 reference  
public float ChangeInZDuringShift(Vector3 characterLocation, Vector3 shiftDestination) {  
    float rangeOfShiftZ = characterLocation.z - shiftDestination.z;  
    if(characterLocation.z > shiftDestination.z){  
        //Debug.Log("We are going Up or upwards " + rangeOfShiftZ);  
        return Mathf.Abs(rangeOfShiftZ) < maxShiftRange ? rangeOfShiftZ: maxShiftRange * -1;  
    }  
    else{  
        //Debug.Log("We are going down or downwards " + Mathf.Abs(rangeOfShiftZ) + " " + maxShiftRange);  
        return Mathf.Abs(rangeOfShiftZ) < maxShiftRange ? Mathf.Abs(rangeOfShiftZ): maxShiftRange;  
    }  
}
```


Conclusion

- ▶ Future of the project

I plan on continuing to work on it. I learned a lot about C# and game development while working on this project. I also learned a lot about best practices with regards to programming and development.