❖ Requirement Specification:-
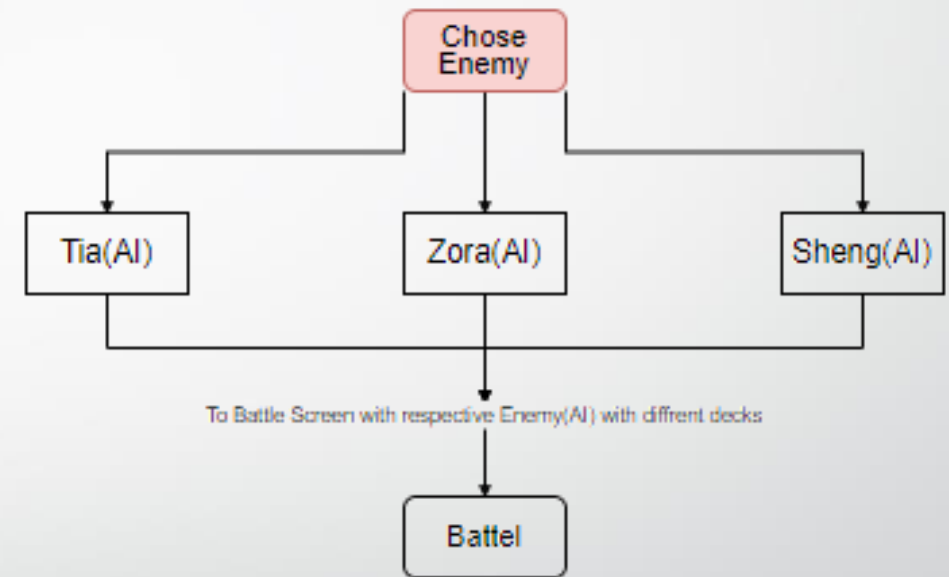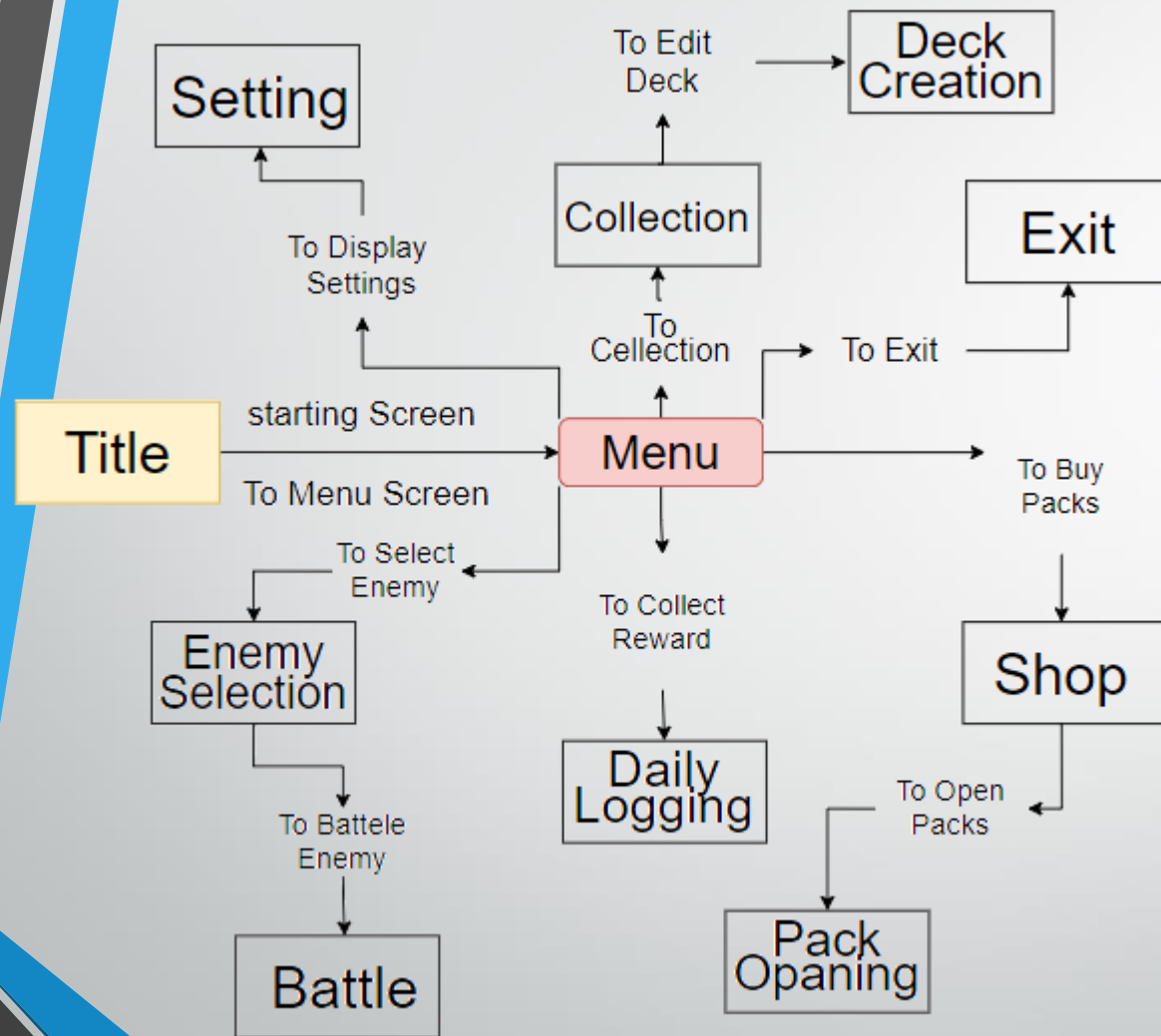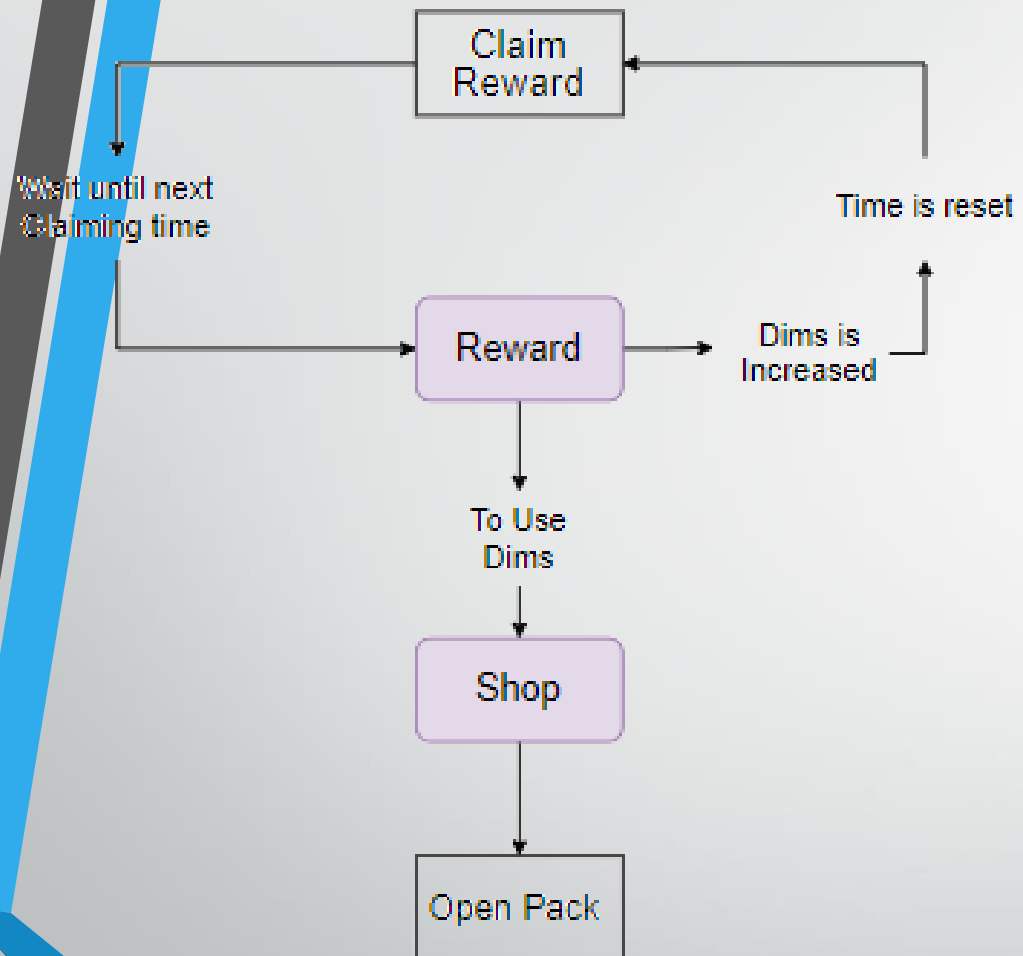
➢ Software

- Unity Game Engine (2020.3.2f1 Personal 64-bit)
- Unity Hub
- Visual studio 2019
- Android SDK

➢ Hardware

- Laptop / Pc
- Processor- AMD Ryzen 5 3600
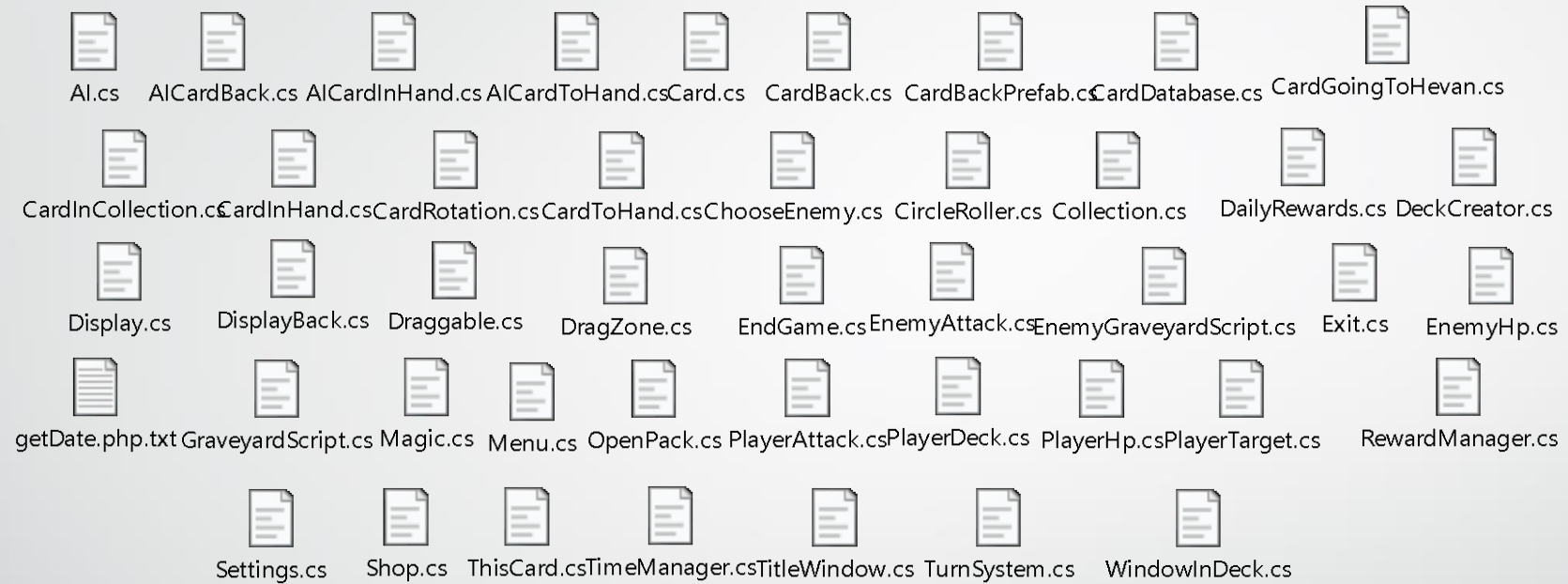- 250GB SSD / 500GB HDD
- MIN 2GB Graphic Card

System Design:

❖ **System Implementation**
✓ **Script's**

AI.cs	AICardBack.cs	AICardInHand.cs	AICardToHand.cs	Card.cs	CardBack.cs	CardBackPrefab.cs	CardDatabase.cs	CardGoingToHevan.cs
CardInCollection.cs	CardInHand.cs	CardRotation.cs	CardToHand.cs	ChooseEnemy.cs	CircleRoller.cs	Collection.cs		DailyRewards.cs	DeckCreator.cs
Display.cs	DisplayBack.cs	Draggable.cs	DragZone.cs	EndGame.cs	EnemyAttack.cs	EnemyGraveyardScript.cs	Exit.cs	EnemyHp.cs
getDate.php.txt	GraveyardScript.cs	Magic.cs	Menu.cs	OpenPack.cs	PlayerAttack.cs	PlayerDeck.cs	PlayerHp.cs	PlayerTarget.cs	RewardManager.cs
Settings.cs	Shop.cs	ThisCard.cs	TimeManager.cs	TitleWindow.cs	TurnSystem.cs	WindowInDeck.cs

✓ **Scene's**

Battle	Collection	DailyLogin	DeckCreation	EnemyChoosing	Exit	Menu	OpenPack	Settings	Shop	Title

✓ Algorithms / Script Methodology

```
if (o==0)
{
    int j=0;
    howManyCards=0;
    foreach (Transform child in Hand.transform)
    {
        howManyCards++;
    }
    foreach (Transform child in Hand.transform)
    {
        cardsInHand[j]=child.GetComponent<AICardToH
and>().thiscard[o];
        j++;
    }
    for (int i = 0; i < 25; i++)
    {
        if (i>=howManyCards)
        {
            cardsInHand[i]=CardDatabase.cardList[o];
        }
    }
    j=0;
}
if (TurnSystem.isYourTurn==false)
{
    for (int i = 0; i < 25; i++)
    {
        if (cardsInHand[i].id !=0)
        {
            if (currentCost>= cardsInHand[i].cardCost)
            {
                AiCanSummon[i]=true;
            }
        }
    }
}
```

```
else
{
    for (int i = 0; i < 25; i++)
    {
        AiCanSummon[i]=false;
    }
}
if (TurnSystem.isYourTurn==false)
{
    drawPhase=true;
}
if (drawPhase==true && summonPhase==false && at
tackPhase==false)
{
    StartCoroutine(WaitFiveSummonPhase());
}
if (TurnSystem.isYourTurn==true)
{
    drawPhase=false;
    summonPhase=false;
    attackPhase=false;
    endPhase=false;
}
if (summonPhase==true)
{
    summonID=0;
    summonThisId=0;
    int index=0;
    for (int i = 0; i < 25; i++)
    {
        cardsID[index]= cardsInHand[i].id;
        index++;
    }
}
```

```
//--------------------------------ALGORITHM-----------------
------------------
    for (int i = 0; i < 25; i++)
    {
        if (cardsID[i]!=0)
        {
            if (cardsID[i]> summonID)
            {
                summonID=cardsID[i];
            }
        }
    }
//-----------------------------------END-----------------------
--------------
    summonThisId=summonID;
    foreach (Transform child in Hand.transform)
    {
        if (child.GetComponent<AICardToHand>().id== summo
nThisId && CardDatabase.cardList[summonThisId].cardCost<=
currentCost)
        {
            child.transform.SetParent(Zone.transform);
            TurnSystem.currrentEnemyCost-
= CardDatabase.cardList[summonThisId].cardCost;
        }
        summonPhase=false;
        attackPhase=true;
    }
```

```
if (o==0)
{
    int k=0;
    int howManyCards2=0;
    foreach (Transform child in Zone.transform)
    {
        howManyCards2++;
    }
    foreach (Transform child in Zone.transform)
    {
        canAttack[k]=child.GetComponent<AICardToHand>().c
anAttack;
        k++;
    }
    for (int i = 0; i < 25; i++)
    {
        if (i>=howManyCards2)
        {
            canAttack[i]=false;
        }
    }
    k=0;
}
```

```
if (o==0)
{
    int l=0;
    int howManyCards3=0;
    foreach (Transform child in Zone.transform)
    {
        howManyCards3++;
    }
    foreach (Transform child in Zone.transform)
    {
        cardsInZone[l]=child.GetComponent<AICardToHand>
().thiscard[o];
        l++;
    }
    for (int i = 0; i < 25; i++)
    {
        if (i>=howManyCards3)
        {
            cardsInHand[i]=CardDatabase.cardList[o];
        }
    }
    l=0;
}
```

```
if (attackPhase==true && endPhase == false)
{
    for (int i = 0; i < 25; i++)
    {
        if (canAttack[i]==true)
        {
            PlayerHp.staticHp-
= cardsInZone[i].cardAttack;
        }
    }
    endPhase=true;
}
if (endPhase==true)
{
    AiEndPhase=true;
}
}
```

Menu
Screen

Title Screen

Collection

Deck Creation Screen

Collection
Screen

Cards In Collection

Create Deck

Welcome To Shop

Your Dims 🪷70

Buy Card Pack

Buy More Card Pack at one time

+ 2 **-**

Confirm

10

Buy More

legenda est

Battlezone

Pack Opening Screen

Shop Screen

Welcome To Shop

Your Dims 🔷 70

Buy Card Pack
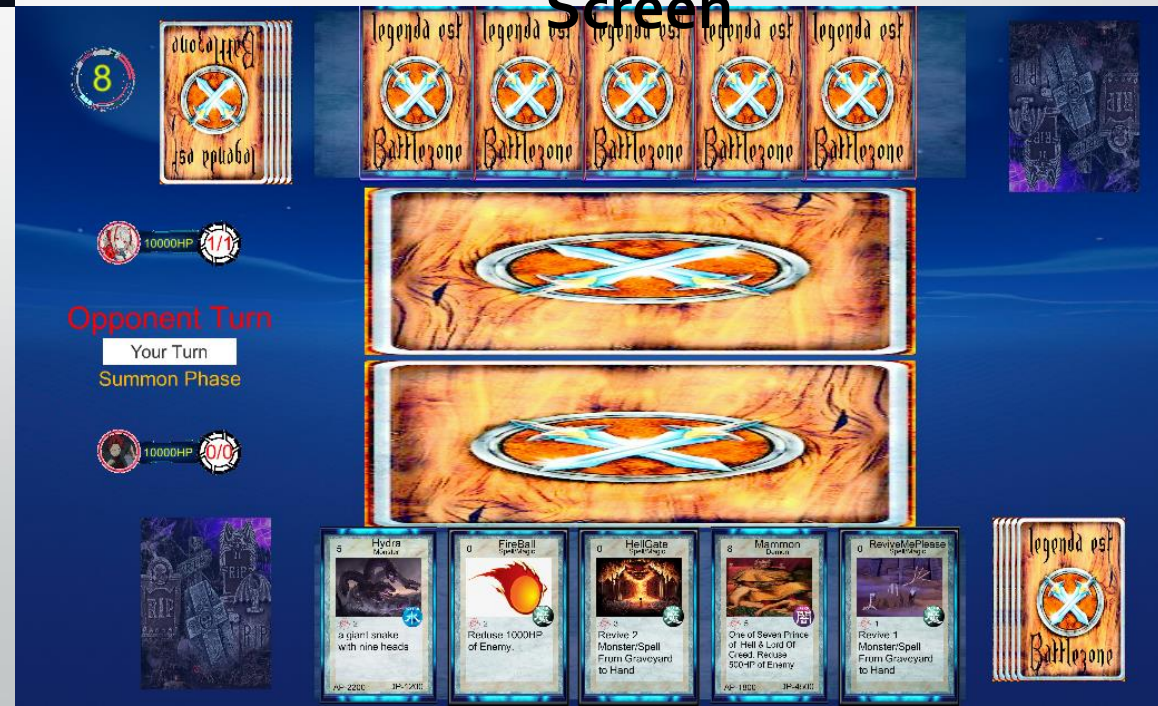
10

Buy More

Buy More Card Pack at one time

+ 2 -

Confirm

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Battlezone

Chose Your Opponent

Tia — Play
Zora — Play
Sheng — Play

Battle Screen

Enemy Selection Screen

Exit Screen

Reward Screen

Magic Creation

Exit

100000

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Thank You