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- **Brief Description:**

This game is a mixture of a card game and an action game which gives a platform for a Single-Player or 2-Players to dive into many adventurous phases until they can meet the final Boss and put an end to him.

The player(s) are challenged with various phases and stages, described in more details later, these phases include battling with a variety of monsters through using some cards and items.
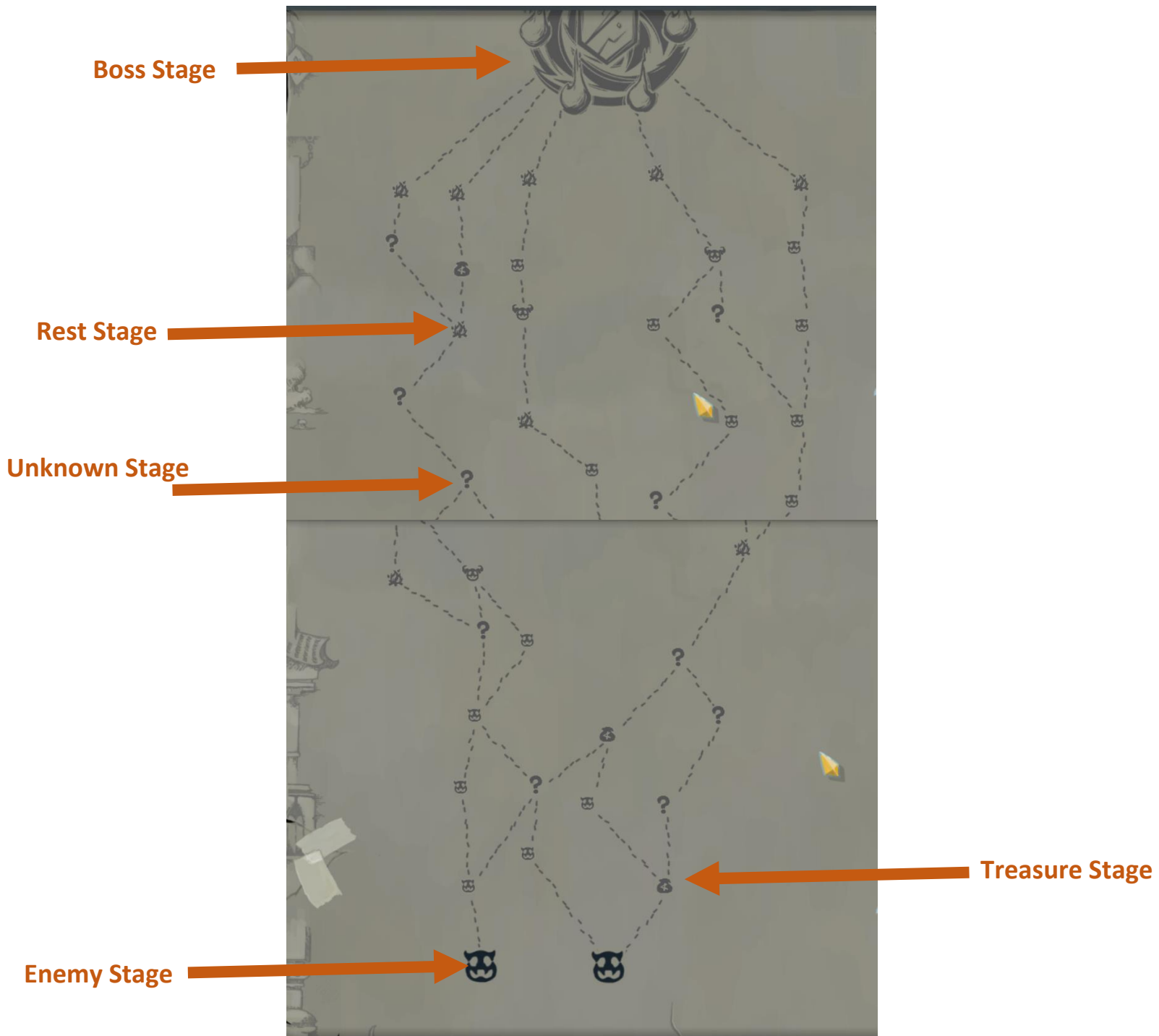
=INFINTY WAR

- **Main Contents:**

A) Phases/Stages:

This game is divided in many stages each stage has its own properties and functionalities and these phases are:

1)Enemy Stage. 2)Rest Stage. 3)Treasure Stage. 4)Unknown Stage. 5)Boss Stage.

Boss Stage

Rest Stage

Unknown Stage

Treasure Stage

Enemy Stage

- A Map Picturing the Phases in the Game -

1) Enemy Stage:

In this Phase the Player Should Defeat the Monsters (3 times at least)

so he can meet the Boss.

The Monsters Could be:

Name	HP (Health Points)	Shield	Attack Damage
Skeleton	45	0	7
Warrior	60	5	11
Zombie	75	10	15
Assassin	90	15	19

2) Rest Phase:

In this stage player's Hp is healed up to 30% of the current Hp.

3) Treasure Phase:

In this stage the player chooses whether to acquire the treasure or not.

4) Unknown Phase:

In this phase other phases randomly are generated (Including a special

phase).

5) Boss Stage:

Last Phase of the game, If the Player Finishes It He/She wins the Game.

Note: The over All Gameplay for The Boss is the Same as the Monsters In the Enemy Stage.

B) Cards' list

Card	Detail
Strike	Deal 1~15 Damage Points.
God's Gift	Deal 15 Damage and Get 15 Shield points.
Devil's Justice	The Player and Monster are Dealt 15 Damage Points.
Thanos's Gauntlet	Lessens Monster's Hp To Half + destroying its shield.
Defend	Get 7 Shield Points.
Quiz Time	You Will Be Challenged with A Random Question And The Results Will Be Depending On Your Answer.
Pandora's Box	Random Action or Powerup is generated.
Thor's Hammer	Deal 15 Damage points directly to HP.
Mind Blast	Deal damage equal to player's kill point.
Reboot	Draw another 5 Cards.

Offering	Lose 5 Hp, gain 2 Souls, Draw 2 cards
Bash	Deal 10 damage, Weaken Monster Attack by 5
Quick Slash	Deal 8 damage, Draw 1 card
Back Flip	Gain 5 Shield, Draw 2 cards
Bite	Deal 7 damage, Heal 5 Hp
Bludgeon	Deal 23 ~ 27 damage
Twin Strike	Deal 7 damage twice
Impervious	Gain 20 Shield
Flash of Steel	Deal 6 damage, Draw 1 card
Adrenaline	Gain 1 soul, Draw 2 cards
Treasure	get 50 Points

C) Items' list

Item	Detail
Time Stone	Player is back to his full health
Soul Potion	Gives 5 souls to the player
Blood Potion	Increases HP by 10%

Fire Potion	Damages the monster with 25 points
Fruit Potion	Increases Hp by 5 points
Block Potion	Increases Shield by 30 points
Dragon Ball	Either you acquire a soul, 10 Hp points or 1000 points

- **Gameplay (Interface,Function and Action):**

The game start with the welcome menu where the user can either choose a

single, multi-player mode or even check the score board.

1) Player Mode:

1) 2 Random phases will Be Generated and the Player will choose one (please refer to the phases described earlier)

```
> > > :1
What's your nickname? user1


            Hello, user1


                    # stage 0 #

 > Choice your Path
 [1] Enemy
 [2] Unknown
>>> 1
```

2) For Enemy/Boss Stage the player can either *Play a card*/*Use An item*/*End his turn*:

a) The Player will start with 3 souls in each turn.

b) **Play A card:** 5 Random Cards Will be Generated and the Player will choose one at a turn (where each card has a cost in terms of soul).

c) **Use an Item**: The items can be acquired through treasure Phase or Killing another Monster.

d) **End Turn:** Turn is changed to the computer when no more souls are left.

```
In Enemy stage, you can get 50 points
Now your Point: 50

        # Warrior appeared! #
-----------------------------------------------------------------------------

        <Player Turn>

  > [user1] HP : 60 / 60              Player Status
    ||||||
  > [user1] Block : 0

  > Warrior's HP: 60                  Monster Status
    ||||||
  > Warrior's Block: 5
    |

> What would you like to do?
  [1] Use Cards
  [2] Use an Item
  [3] Turn End
>>> 1                         Player Souls ($)

        > user1's Souls: $$$
[1] Pandora's Box : No One Knows What's In The Box. If You're Brave Enough, Open It! ($)
---------------------      Card Cost (in Souls)
[2] Strike : Deal 1~15 Damages ($)
---------------------
[3] Treasure : get 50 Points ($$$)
---------------------
[4] Adrenaline : Gain 1 soul, Draw 2 cards ()
---------------------
[5] Thanos's Gauntlet : Lessens Monster's Hp To Half destroying its shields.($$$$)
---------------------
[0] Back (If there is nothing to do)
>>>
```

3)Player's turn ends when no more souls are left then monster's turn starts.

4)This Process goes on until either the Enemy/Boss or Player is Defeated.

2) 2-Players Mode:

The Process is quite like 1-player mode but the only difference is that the Monsters will have double the strength and player1 player2 have turns in a row before the monster attacks. (Please refer to the pictures above)

1) 2 Random phases will Be Generated and the Players will choose one (please refer to the phases described earlier)

2) For Enemy/Boss Stage the player1 can either *Play a card/Use An item/End his turn*:

a) The Player1 will start with 3 souls in each turn.

b) **Play A card:** 5 Random Cards Will be Generated and the Player1 will choose one at a turn (where each card has a cost in terms of soul).

c) **Use an Item**: The items can be acquired through treasure Phase or Killing another Monster.

d) **End Turn:** Turn is changed to the computer when no more souls are left.

3)Player1's turn ends when no more souls are left then player2's turn starts.

4)Player2 repeats the same process until his turn ends then the monster attacks.

5)This Process goes on until either the Enemy/Boss or Players are Defeated.

3)Score Board:

Score Points Are gained in many ways:

1)*Passing the Rest Stage:* 15 points are gained.

2)*Passing the Treasure Stage:* 30 points are gained.

3)*Passing the Unknown Stage:* 40 points are gained.

4)*Passing the Special Stage:* 777 Points Are gained.

5)*Passing the Boss Stage:* 200 Points Are gained.

6)*For each Stage:* 10 points are gained.

7)*For killing each monster:* Points depending on the strength of the monster.

8)*Using the Treasure Card:* 50 Points Are gained.

```
 Console

Game [Java Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (Jun 9, 2018, 12:12:14 AM)


        #######################
        #Welcome to Infinty War!#
        #######################



    ------------------------------------------------
                [Menu]

            [1]   Single Player
            [2]   Multi Player
            [3]   Score Board
    ------------------------------------------------
> > > :3
            < Game name's ScoardBoard >

    Name    Score           Time
    harry   82          2018/06/06 03:12:17 PM

    asia    894         2018/06/07 02:55:54 AM

    dahab   165         2018/06/07 09:28:48 AM

    dahab   88          2018/06/07 09:46:23 AM

    hook    1730        2018/06/07 11:34:59 AM

    firdya 875          2018/06/07 01:04:09 PM

    jy      6457        2018/06/08 05:03:47 PM


    ------------------------------------------------
            Menu

            [1]   Single Player
            [2]   Multi Player
            [3]   Exit this game
    ------------------------------------------------
> > > :
```

- **Discussion:**

In summary we tried to use as many methods and classes which serve the goal of object oriented programming, as we learnt through this semester, we used also exceptions which are quite unique in handling different kind of errors.

The most interesting part is a problem we faced while creating this game where we needed to decide whether to implement itemList and cardList as a separate class or not?

We tried to do both ways, but it was pretty obvious that maintaining the Object-Oriented Programming would've made the code more complex rather than make it simpler.

So, we Stuck with the idea of implementing Both Classes as variables in the "Player Class".
*Please refer to the source code.