**Game Plan**

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Subject: ANA-1001 - Programming for Analytics

Assignment: Midterm Project

Locations: Home, Nidavellir, Wakanda, Asgard, Klyntar, Outer Space, Mirror Dimension, Vormir

Characters (Avengers, alive): Black Panther, Thor, Spiderman, Hawkeye, Dr. Strange, Antman

Characters (Avengers, dead): Scarlet Witch, Hulk, Captain Marvel, Vision

Characters (Villains): Thanos (dead), Kilmongor, Loki, Venom, Ultron, Kaecilius, Red Skull

Characters (Others): King Eitri

Items: Gauntlet (Acts as a list to hold items), Space Stone, Reality Stone, Power Stone, Mind Stone, Time Stone, Soul Stone

Money: Gold Coins.

Health: Health is shown in percentage. Maximum health is 100%. If health goes below 0% player dies.

Actions: Can only be accessed at home

1. Eat: Costs 5 gold coins. Increases health by 20 %.
2. Play Rock Paper Scissors with Dr. Strange: Costs 10 coins to play. Win or, a draw gives the player 10 gold coins. A loss will cost 10 gold coins. If the player does not have enough gold coins and wants to play, Dr. Strange gives the player 30 extra gold coins.
3. Talk: This option lets players go on missions to retrieve the infinity stones.
4. Quit: Lets the player exit the game.

Location, characters, and Items Connections:

1. Home => Dr. Strange, No item
2. Nidavellir => King Eitri, Gauntlet
3. Wakanda => Kilmongor, Space Stone
4. Asgard => Loki, Reality Stone
5. Klyntar => Venom, Power Stone
6. Outer Space => Ultron, Mind Stone
7. Mirror Dimension => Kaecilius, Time Stone
8. Vormir => Red Skull, Soul Stone

Condition to access each location:

1. Home => Default Location
2. Nidavellir => Player does not have the Gauntlet
3. Wakanda => Player has the Gauntlet and does not have the Space Stone
4. Asgard => Player has the Gauntlet and the Space Stone
5. Klyntar => Player has the Gauntlet and the Space Stone
6. Outer Space => Player has the Gauntlet, the Space Stone, and the Reality Stone
7. Mirror Dimension => Player has the Gauntlet and the Space Stone
8. Vormir => Player has the Gauntlet and the Space Stone

Condition to win in each location:

1. Nidavellir => Player must have at least 50 coins
2. Wakanda => Any Avengers can win but minimum health must be 70%
3. Asgard => Only Thor, or Dr. Strange can win with at least 30% health, Other Avengers can win but chances are random
4. Klyntar => Only Thor, Spiderman, or Dr. Strange can win with at least 50% health, Other Avengers can win but chances are random
5. Outer Space => Need to have the Reality Stone, and either Thor or Antman can win, with at least 90% health. Every other Avengers will lose.
6. Mirror Dimension => Dr. Strange will automatically be chosen and will win.
7. Vormir => Any Avenger except Thor, or Dr. Strange will win. Health will not be affected.