GameManager.cs

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class GameManager : MonoBehaviour
{
    //Integer member variable called "currentGameLevel"
    public int currentGameLevel;
    public GameObject asteroidPrefab;

    // Start is called before the first frame update
    void Start()
    {
        currentGameLevel = 0;
        /*Camera is positioned at 0,30,0
         * Facing towards 0,0,0 with 0,0,1 as its 'up' axis */
        Camera.main.transform.position = new Vector3(0, 30, 0);
        Camera.main.transform.LookAt(new Vector3(0, 0, 0), new Vector3(0, 0, 1));


        StartNextLevel();
    }

    // Update is called once per frame
    void Update()
    {

    }

    void StartNextLevel()
    {
        //Increment the current game level
        currentGameLevel++;
        //Number of asteroids depends on game level
        int numberOfAsteroids = currentGameLevel * 5;

        //instantiate a set of asteroids towards the edges of the visible screen using a
for loop
        for (int i = 0; i < numberOfAsteroids; i++)
        {
            GameObject asteroid = GameObject.Instantiate(asteroidPrefab);
            //scale the asteroid to a random size between 0.2 and 0.35
            asteroid.transform.localScale = new Vector3(Random.Range(0.2f, 0.35f),
Random.Range(0.2f, 0.35f), Random.Range(0.2f, 0.35f));
        }
    }


}
```

Asteroid.cs

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Asteroid : MonoBehaviour
{
    public GameObject asteroidObject;

    private Vector3 spawnPoint;

    // Start - called before the first frame update
    void Start()
    {
        //Set the asteroid's position at a random position near the edges of the screen
        if(Random.Range(0, 2) == 0) {
            //Spawn on top or bottom
            if(Random.Range(0, 2) == 0) {
                //Spawn on top
                spawnPoint = new Vector3(Random.Range(-30f, 30f), 0, 30);
            } else {
                //Spawn on bottom
                spawnPoint = new Vector3(Random.Range(-30f, 30f), 0, -30);
            }
        } else {
            //Spawn on left or right
            if(Random.Range(0, 2) == 0) {
                //Spawn on left
                spawnPoint = new Vector3(-30, 0, Random.Range(-30f, 30f));
            } else {
                //Spawn on right
                spawnPoint = new Vector3(30, 0, Random.Range(-30f, 30f));
            }
        }



        //Set the asteroid's position
        asteroidObject.transform.position = spawnPoint;

        //Move the asteroid in a random direction
        asteroidObject.GetComponent<Rigidbody>().AddForce(new Vector3(Random.Range(-700f,
700f), 0, Random.Range(-700f, 700f)));

        //Rotate the asteroid in a random direction
        asteroidObject.GetComponent<Rigidbody>().AddTorque(new Vector3(Random.Range(-500f,
500f), Random.Range(-500f, 500f), Random.Range(-500f, 500f)));

        //Wrap asteroids to other side of screen, check every 0.2 seconds. 5 times a
second
        InvokeRepeating("CheckIfOffScreen", 0.2f, 0.2f);
```

```
    }

    void CheckIfOffScreen()
    {
        Vector3 currentWorldPos = asteroidObject.transform.position;
        Vector3 viewPosition = Camera.main.WorldToViewportPoint(currentWorldPos);
        if (viewPosition.x > 1f)
        {
            asteroidObject.transform.position = new Vector3(-currentWorldPos.x + 1, 0,
currentWorldPos.z);
        }

        if (viewPosition.y < 0f)
        {
            asteroidObject.transform.position = new Vector3(currentWorldPos.x, 0, -
currentWorldPos.z - 1);
        }

        if (viewPosition.x < 0f)
        {
            asteroidObject.transform.position = new Vector3(-currentWorldPos.x - 1, 0,
currentWorldPos.z);
        }

        if (viewPosition.y > 1f)
        {
            asteroidObject.transform.position = new Vector3(currentWorldPos.x, 0, -
currentWorldPos.z + 1);
        }


    }

    // Update is called once per frame
    void Update()
    {

    }
}
```