

# ASTEROIDS GAME

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## Step 1: Modeling the environment (10%)

There is 4 walls which Asteroids and Player can collide.

## Step 2: Keyboard interaction (20%)

The inputs are WASD and Arrows for the control of the spaceship, Space bar and left click on mouse for shooting

## Step 3: Physics 30% total

Asteroids move linearly and collide with the walls. Asteroids can collide with each other as well.

Asteroids can break 2 times and the smaller ones goes to opposite directions.

## Step 4: Gameplay (20%)

The score is shown on the up left corner of the screen and the levels are shown on the up right corner. Small asteroids give 100, medium 50 and big asteroids give 25 points. Player starts at level 1 and pass the level 1 at score 1500. Score needed to pass the levels are increasing exponentially by 50% more. So level 2 is passed at 2250 point and level 3 3375 so at first it's easier to pass levels but then it gets harder. Every level the speed of the asteroids increase 0.5 more and every 5 levels the amount of asteroids spawned in every 2 seconds is increased by 1.

## Step 5: Creativity (20%)

There is a meteor that passes the screen and if the player can shoot it they will gain an extra live.

The meteor passes the screen every 10 seconds but every 5 levels the amount of meteor spawns increase by 1.

The game has a main menu which you can go into options, quit the game or play the game by pressing the space bar.

In game you can press the escape on keyboard and a menu will show up with resume button, menu button that will transfer you into the main menu and a quit button that will quit the game.

There are also sound effects when you shoot, when the bullets collided with the asteroid, when the player collides with the asteroids or when a player shoots the meteor and gains an extra live.