**IT-326: Introduction to Artificial Intelligence – Angry Birds**

**Week 4 –Submission**

**Team : Finishers**

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**Code Implementation for previously suggested Strategies**

1. Found the Center of mass of the whole structure by assigning different weights to different objects (Wood Ice Stone)

|  |  |
| --- | --- |
| **Object** | **Weight** |
| Wood | 30 |
| Ice | 25 |
| Stone | 50 |

2. Used the below given formulae for finding the Center of mass

X (Numerator) = X(Denominator) =

Y (Numerator) =∑ (ob (i).y)\* (ob (i).width)\* (ob (i).height)\* (ob (i).weight)

Y (Denominator) =∑ (ob (i).width)\* (ob (i).height)\* (ob (i).weight)

(X.cm, Y.cm)= ((X(Numerator)/X(Denominator) ),(Y(Numerator)/Y(Denominator)))

3. We found the Centre of mass using above formulae and hit the first bird on the center of mass with the least possible angle. Rest of the shooting is done using the old strategy with an Improvement of hitting the pig in highest position which is nearer to the bird so this may cause more destruction on the remaining structure as the destructed structure may move in the direction of motion of the bird.