

# Grafika Komputer | Proyek 1

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## Detail Laporan

Tema

Model

Animasi

Implementasi code

Detail pembagian tugas

## Tema

Angry Bird

## Model

### 1. Karakter

- Mathilda
- Blue
- Pig

### 2. Environment

- Dirt
- Slingshot
- Explosion
- Stone
- Log
- Bush
- Tree
- Base

## Penjelasan Model

### Karakter

#### 1. Mathilda

Beak menggunakan half sphere dan modified elliptic paraboloid

Eyeball menggunakan sphere

Iris menggunakan sphere

Eyelid menggunakan modified elliptic paraboloid

Kepala menggunakan elliptic paraboloid

Body menggunakan half sphere

Feather menggunakan pipe

Tail menggunakan pipe

Eyebrow menggunakan parallelogram

Cheek menggunakan sphere

#### 2. Blue

Beak menggunakan modifies ellipsoid

Eyeball menggunakan sphere  
Iris menggunakan sphere  
Feather menggunakan pipe  
Tail menggunakan box  
Body menggunakan Sphere  
Eye Socket menggunakan modified ellipsoid

### 3. Pig

Eyebrow menggunakan BSpline curve  
Ear menggunakan half ellipsoid  
Nose menggunakan ellipsoid dan circle  
Eyeball menggunakan sphere  
Iris menggunakan sphere

### Environment

#### Box

1. Glass
2. Log
3. Tree Stem
4. Stone
5. Dirt
6. Slingshot handle
7. Base

#### Sphere

1. Explosion
2. Bush

#### Cone

1. Tree

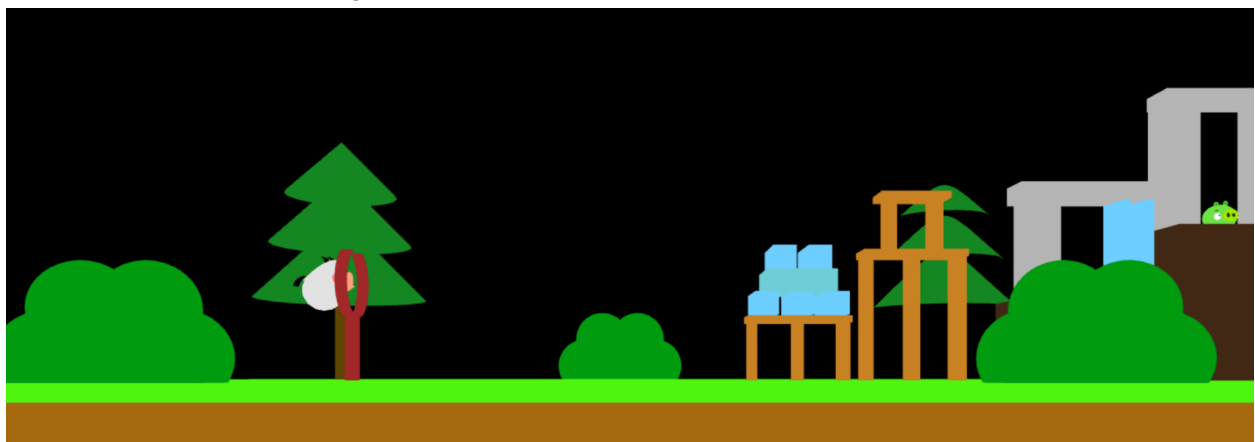
#### Pipe

1. Slingshot fork

### Animasi

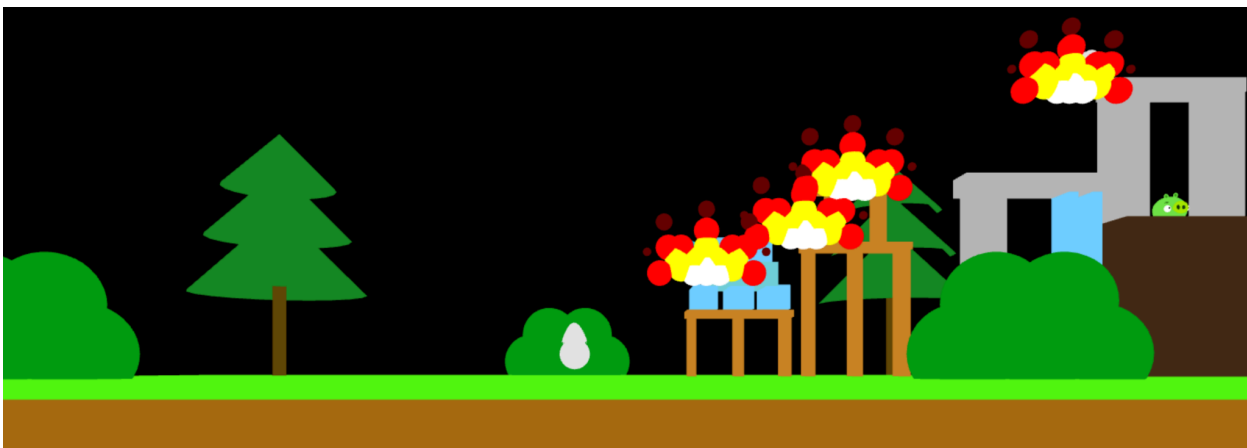
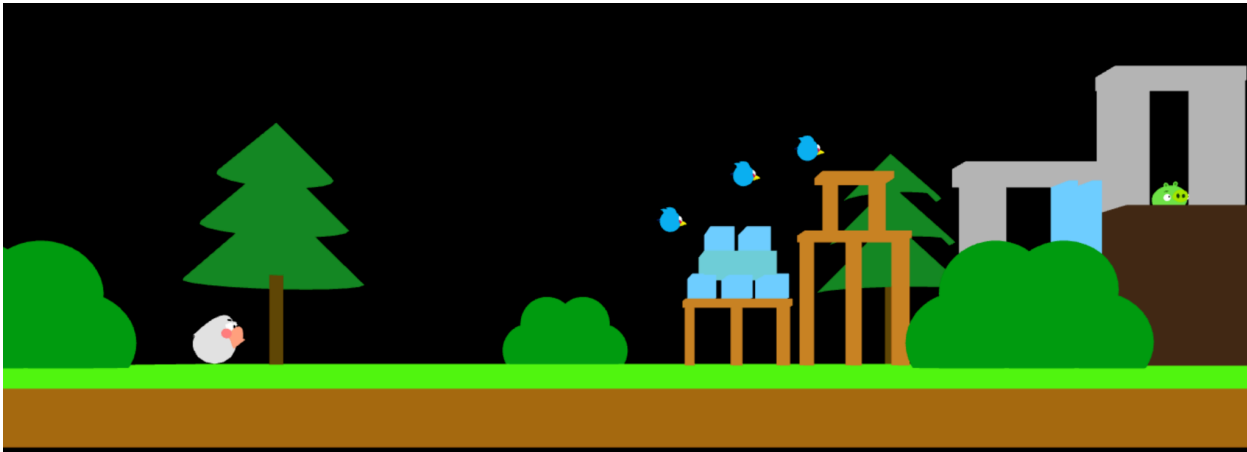
#### Prepared attack from slingshot

1. Use rotate arbitrary axis



### Launch attack

1. Use BSpline curve for parabolic movement
2. Use scaling (blue split itself into 3 blues with smaller body, and mathilda throw an egg wich similar to its body but smaller)
3. Use translation for moving within the parabolic path and for the explosion



### Bouncing

1. Use translation

### Body roll

1. Use rotation
2. Use BSpline curve to make the path
3. Use translation to walk along the path

### Beak Movement

1. Use rotation

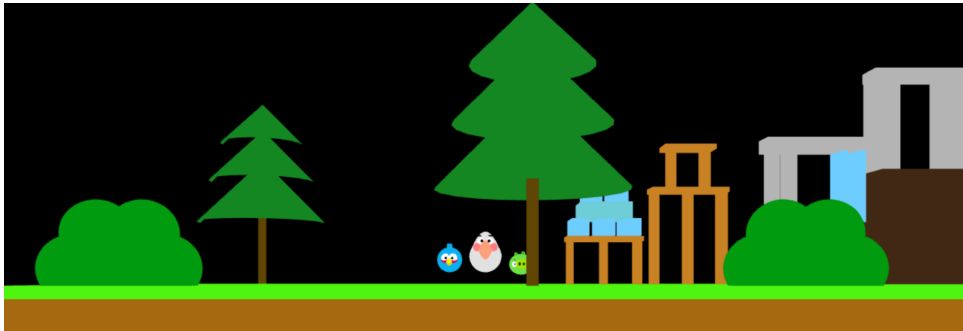
### Eye Movement

1. Use translation (look left and right)

### Idle and camera control

1. Use rotation
2. Use scaling

### 3. Use translation



#### Falling down animation

1. Use rotation
2. Use downward translation

#### Implementasi Code

[Clesssss/Angry-Bird \(github.com\)](https://github.com/Clesssss/Angry-Bird)

#### Detail Pembagian Tugas

##### Richard

Membuat model pig

Finishing

Gathering model

Animation (falling, rotation, translation, scaling)

Cleaning up code

##### Steve

Environment

Membuat model mathilda

Animation (rotation arbitrary, rotation, translation, BSpline, scaling)

Membuat laporan

Membuat efek

##### Kiko

Environment

Membuat model blue

Animation (rotation arbitrary, rotation, translation, BSpline, scaling, beak movements)

Mengedit video

Membuat efek

Membuat kontrol kamera dan model