

Final Project UML Diagrams  
Once Upon a Loaf (TBD)

**Woo.pde**

**Instance Variables**

- Hansel      hansel
- Gretel      gretel
- PImage      gretel
- PImage      gretelImages[]
- int          gretelFrames
- PImage      hansel
- PImage      hanselImages[]
- int          hanselFrames
- boolean     up
- boolean     down
- boolean     left
- boolean     right

**Methods**

- + void        setup()
- + void        draw()
- + void        keyPressed()
- + void        keyReleased()

**Background.pde**

**Instance Variables**

- Bush        bush
- Tree        tree
- Water       water
- Rock        rock

**Methods**

- + void        forest()
- + void        lagoon()
- + void        witchHouse()
- + void        witchKitchen()
- + void        home()

```
+ void maze()
```

### **Tree.pde extends Background**

#### **Instance Variables**

```
- int xCor  
- int yCor
```

#### **Methods**

```
+ Tree(int, int)  
+ boolean collision()  
+ int getXCoor()  
+ int getYCoor()
```

### **Bush.pde extends Background**

#### **Instance Variables**

```
- int xCor  
- int yCor
```

#### **Methods**

```
+ Bush(int, int)  
+ boolean touching()  
+ void spawnMonster()  
+ int getXCoor()  
+ int getYCoor()
```

### **Kid.pde**

#### **Instance Variables**

```
- String _name  
- int _health  
- int _strength  
- int xGret  
- int yGret  
- float xGspeed  
- float yGspeed  
- boolean gretLeads  
- int xHans  
- int yHans  
- float xHspeed  
- float yHspeed  
- boolean hansLeads
```

```
-    int        currentFrame
-    int        loopFrames
-    int        offset
-    int        delay
```

#### **Methods**

```
+            Kid()
+            Kid(int, int)
+    int      getHealth()
+    int      getStrength()
+    void      setHealth(int)
+    void      setStrength(int)
+    void      attack()
+    void      superMove()
+    void      whoLeads()
+    void      display()
+    void      walk()
```

#### **Hansel.pde extends Kid**

#### **Methods**

```
+            Hansel(String, int, int)
+    void      superMove()
```

#### **Gretel.pde extends Kid**

#### **Methods**

```
+            Gretel(String, int, int)
+    void      superMove()
```

#### **Monster.pde**

#### **Instance Variables**

```
-    int        _health
-    int        _strength
-    Queue      _moveList
```

#### **Methods**

```
+            Monster()
+            Monster(int, int)
+    int      getHealth()
+    int      getStrength()
+    void      setHealth(int)
```

```
+    void    setStrength(int)
+    void    attack()
```

### **Witch.pde extends Monster**

#### **Methods**

```
+    Witch(String, int, int)
+    void    superMove()
```

### **Wolf.pde extends Monster**

#### **Methods**

```
+    Wolf(String, int, int)
+    void    superMove()
```