

Final Project UML Diagrams
Once Upon a Loaf

Woo.pde

Instance Variables

```
PImage gretelImages []
PImage hanselImages []
int gretelFrames, hanselFrames
boolean up, down, left, right
boolean startG = true
boolean tutorial = false
boolean storyDialogue = false
int currIndex
Dialogue dialogue
Queue<String> story
Background peep
Kid kid
Battle battle
boolean playerTurn = false
PFont font
boolean inBattle
boolean battleWon
int counter
boolean readingSpeed
Monsters enemy;
boolean playerTurn = false;
enemyHp;
kidHp = 0;
strength;
kidDefense = 5;
int ultCounter
String playerMove
String enemyNextMove
PImage enemyImage
PImage bg;
```

```
String moveDescription  
PImage[] forest = new PImage[20]
```

Methods

```
+ void    keyPressed()  
+ void    keyReleased()  
+ void    updEnemy()  
+ int     attackEnemy()  
+ int     enemyMove()  
+ void    enemyMoveFinder()  
+ void    updPlayer()  
+ void    updateBaseStats()  
+ void    setBattleUp()  
+ void    checkMonster()  
+ boolean battle()
```

Background.pde

Instance Variables

```
Tile[][]  
int tileXCor;  
int tileYCor;  
DuplicateMap fwdTrigPnts  
DuplicateMap prevTrigPnts  
LinkedList<String[]> worldList
```

Methods

```
+ Background()  
+ void    render()  
+ void    Triggered()  
+ void    battleScreen()  
+ void    BattleScreenWon()  
+ void    battleScreenOver()  
+ void    gameWon()  
+ void    exitBScreen()
```

Tile.pde

Instance Variables

```
int xCor;  
int yCor;  
boolean isCollidable;  
boolean isSpawnable;  
boolean isTrigger;  
String monsterType;
```

Methods

```
+   Tile()  
+   int      getXCor()  
+   int      getYCor()  
+   int      getMonType()
```

Tree.pde extends Tile

Instance Variables

```
-   PImage tree
```

Methods

```
+   Tree(int, int, boolean)
```

Rock.pde extends Tile

Instance Variables

```
-   PImage rock
```

Methods

```
+   Rock(int, int, boolean)
```

Water.pde extends Tile

Instance Variables

```
-   PImage rock
```

Methods

```
+   Water(int, int, boolean)  
+   Water(int, int, boolean, String)
```

Grass.pde extends Tile

Instance Variables

- PImage grass
- PImage witchHouse

Methods

- + Grass(int, int, boolean, boolean)

Path.pde extends Tile

Instance Variables

- PImage path

Methods

- + Path(int, int, boolean)

Path.pde extends Tile

Instance Variables

- PImage path

Methods

- + Path(int, int, boolean)

Kid.pde

Instance Variables

String _name

int _health

int _strength

int xGret

int yGret

float xGspeed = 0

float yGspeed = 0

int xHans = 35

int yHans = 925

float xHspeed = 0

float yHspeed = 0

int xLead

int yLead

boolean gretLeads, hansLeads

```
boolean canBattle
```

```
int currentFrame = 0
```

```
int loopFrames = 3
```

```
int offset = 0
```

```
int delay = 0
```

```
int xTile, yTile, yGTemp, xGTemp, yHTemp, xHTemp;
```

Methods

```
+ Kid()  
+ Kid(int, int)  
+ int getHealth()  
+ int getStrength()  
+ void setHealth(int)  
+ void getStrength(int)  
+ void whoLeads()  
+ void display()  
+ void walk()  
+ boolean checkBoundaries(int, int)  
+ void checkEnemy(int, int)  
+ boolean(int, int)
```

Monsters.pde

Instance Variables

```
+ int health  
+ int strength  
+ int x  
+ int y  
+ String name  
+ String attack  
- Queue<String> moveList
```

Methods

```
+ int getX()  
+ int getY()
```

```
+   boolean isAlive()
+   void display()
+   String getName()
+   int getHp()
+   int getStrength()
+   int setHp(int)
+   int setStrength(int)
+   int attack(String)
+   String getAttack()
```

Witch.pde

Instance Variables

```
+   PImage Witch
```

Methods

```
+   Witch()
+   int attack()
```

Wolf.pde

Instance Variables

```
+   PImage Wolf
```

Methods

```
+   Wolf()
+   int attack()
```

Imp.pde

Instance Variables

```
+   PImage Imp
```

Methods

```
+   Imp()
+   int attack()
```

Siren.pde

Instance Variables

```
+   PImage Siren
```

Methods

```
+   Siren()
```

```
+    int attack()
```

Snake.pde

Instance Variables

```
+    PImage Snake
```

Methods

```
+    Snake()
```

```
+    int attack()
```

Dialogue.pde

Instance Variables

```
    String lines
```

Methods

```
+    void startGame()
```

```
+    void tutorial()
```

```
+    void writeDialogue()
```

DuplicateMap.pde

Instance Variables

```
    Map<Integer, List<Integer>> map;
```

Methods

```
+    DuplicateMap()
```

```
+    void addValue()
```

```
+    boolean contains()
```

```
+    void printMap()
```

```
+    void keySet()
```

```
+    void get(Integer)
```

```
+    void reset()
```
