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Attributes	Methods
boolean startGame, endGame int difficulty TownHall th Barack bk ArrayList<Structure> structures ArrayList<Troop> troops ArrayList<Enemy> enemies float gold int enemySec int troopSec State state(enums for mouse) State structureSelected Structure currentStructure String message	mouseDragged() mouseReleased() mouseClicked() mousePressed() mouseWheel() keyPressed() String canPlace(Structure, x, y) boolean isInside(Structure, x, y) setup() draw() generate() displayMessage() endGame() startGame() enemySpawn() displayHealth()

interface Location<T>	
Attributes	Methods
	float getX() float getY()

ALHeap<T extends Location<T>>	
Attributes	Methods
ArrayList<T> _heap float x float y	boolean isEmpty() T peekMin() void add(T) T removeMin() int minChildPos(int) T minOf(T a, T b) float compareTo(T a, T b) swap(int pos1, int pos2)

abstract Entity implements Location<Entity>

Attributes	Methods
float _health float _attack float _x float _y float _centerX float _centerY float _width float _height float _range	float getX() float getY() float getCX() float getCY() float getHealth() float getAttack() float getGold() void setHealth(float) takeDamage(float) <i>abstract void display()</i>

abstract Unit extends Entity	
Attributes	Methods
float _speed float _gold color c int state ALHeap<Entity> targets	float getSpeed() void attack(Entity) void update() void attack() <i>abstract void move()</i> <i>abstract void display()</i>

interface Comparable<T>	
Attributes	Methods
	compareTo(T other)

ArrayPriorityQueue<T extends Comparable<T>>	
Attributes	Methods
ArrayList<T> _queue	ArrayPriorityQueue() void add(T x) boolean isEmpty() T peekMin() T removeMin() String toString()

Troop extends Unit implements Comparable<Troop>	
Attributes	Methods
Barrack home float time	Troop(int difficulty) void setC(int difficulty) void defaults() void heaping() float getTime() int compareTo(troop) void display() void move()

Enemy extends Unit	
Attributes	Methods
int target float gold	Enemy(int difficulty) void setC(int difficulty) void defaults() void heaping() void display() void move() float getGold() void add(Entity)

Structure extends Entity	
Attributes	Methods
String ID color c; Bullet b	void attack(Entity) boolean isA(String) void rotate() void display() void update() boolean inRange(Entity)

TownHall extends Structure	
Attributes	Methods
	TownHall() String toString()

Barrack extends Structure	
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Barrack extends Structure	
Attributes	Methods
ArrayPriorityQueue<Troop> trainingQ;	Barrack() void train()

Wall extends Structure	
Attributes	Methods
	Wall()

Cannon extends Structure	
Attributes	Methods
	Cannon()

Bullet	
Attributes	Methods
float speed float w float h float x float y float dx float dy	Bullet(startX, startY, moveX, moveY) void move() float getX() float getY() boolean collision(Entity)