Casa-de-Java -- Kevin Wang, Larry Wong, Alvin Ye
APCS2 Pd. 8
Final Project
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CreateMap

- int boxsize
- int cols
- int rows
-Square[][] grid
- boolean creationDone

+ boolean creationProcess()
+ void saveMap()
+ void printMap()
+ void mapClick(int x, int y)
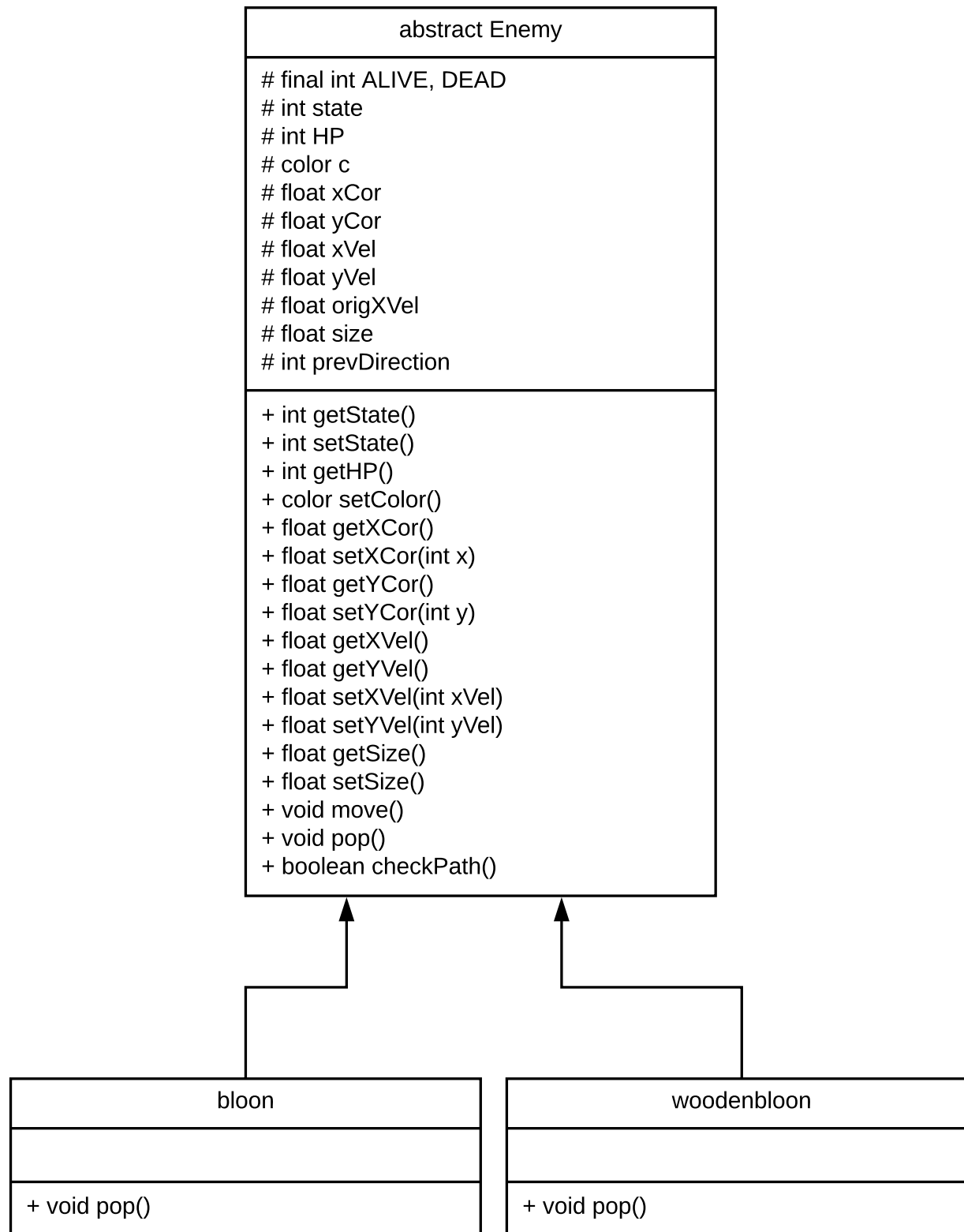+ void clearThis()

MazeChecker

- int MAZ_SIZE
- char[][] maze
- boolean solved
- char PATH
- char THE_EXIT
- char CURRENT
- char VISITED_PATH

+ void solve()
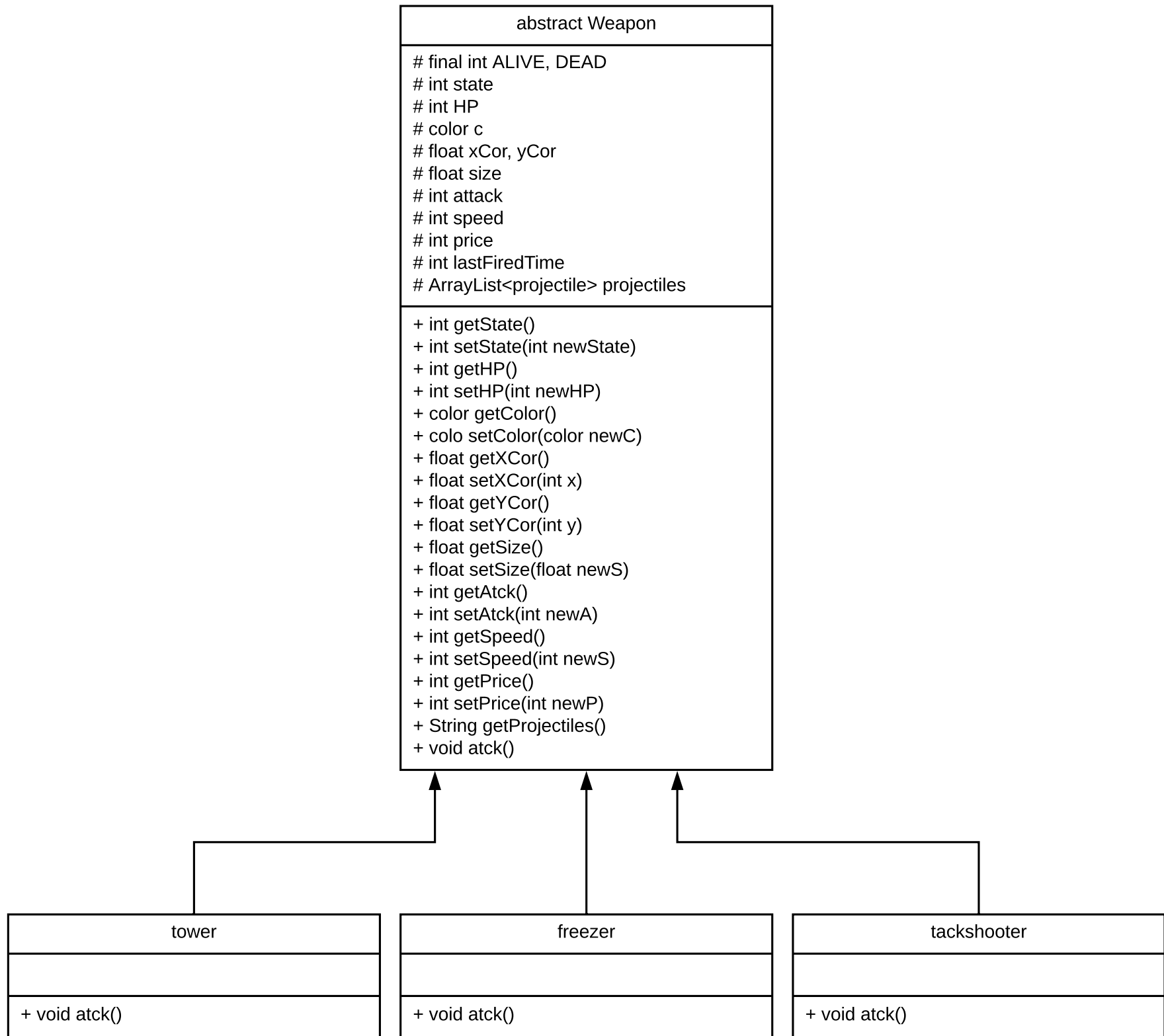+ boolean checkMaze()

PathFinder

- int MAX_SIZE
- char[][] maze
- int heightM
- int widthM
- Queue<Node> queue;
- Node shortestPath;
- char WALL
- char PATH
- char THE_EXIT
- char VISITED

+ void getPath(int colStart, int rowStart)
+ String toString()
+ void solve()

Node

- int xCor
- int yCor
- Node parentnode

+Node getParent()
+ int getX()
+ int getY()
+ String toString()

Square

- int state;
- int rows;
- int cols;
- int boxsize;
- color c;

+ void changeState()
+ void changeColor()
+ void appear()
+ int getState()
+ void setState()

Player

- ArrayList<weapon> weapons
- int money
- int health
- int level

+ String getWeapons()
+ int getMoney()
+ int setMoney(int m)
+ int getHealth()
+ int setHealth(int h)
+ int getLevel()
+ int setLevel(int l)
+ void play()
+ void buy(float mX, float mY, float type)

abstract Enemy

final int ALIVE, DEAD
int state
int HP
color c
float xCor
float yCor
float xVel
float yVel
float origXVel
float size
int prevDirection

+ int getState()
+ int setState()
+ int getHP()
+ color setColor()
+ float getXCor()
+ float setXCor(int x)
+ float getYCor()
+ float setYCor(int y)
+ float getXVel()
+ float getYVel()
+ float setXVel(int xVel)
+ float setYVel(int yVel)
+ float getSize()
+ float setSize()
+ void move()
+ void pop()
+ boolean checkPath()

bloon

+ void pop()

woodenbloon

+ void pop()

abstract Weapon

final int ALIVE, DEAD
int state
int HP
color c
float xCor, yCor
float size
int attack
int speed
int price
int lastFiredTime
ArrayList<projectile> projectiles

+ int getState()
+ int setState(int newState)
+ int getHP()
+ int setHP(int newHP)
+ color getColor()
+ colo setColor(color newC)
+ float getXCor()
+ float setXCor(int x)
+ float getYCor()
+ float setYCor(int y)
+ float getSize()
+ float setSize(float newS)
+ int getAtck()
+ int setAtck(int newA)
+ int getSpeed()
+ int setSpeed(int newS)
+ int getPrice()
+ int setPrice(int newP)
+ String getProjectiles()
+ void atck()

tower

+ void atck()

freezer

+ void atck()

tackshooter

+ void atck()

BTD (Driver)

+ PFont font24,
+ PFont font72
+ PShape tower,
+ PShape freezer,
+ PShape freezerInner,
+ PShape freezerOuter,
+ PShape tackshooter,
+ PShape tackshooterCircle,
+ PShape tackshooterLeft,
+ PShape tackshooterRight,
+ PShape tackshooterUp,
+ PShape tackshooterDown;
+ color crimson
+ color sapphire
+ color wood
+ color moss
+ color rose
+ color ice
+ color gold
+ color silver
+ int time
+ boolean paused
+ boolean beginning
+ boolean creationDone
+ boolean displayTitle
+ int titleAppeared
+ int titleStartTime
+ int instructionsAppeared;
+ int waveType
+ player localPlayer
+ CreateMap world
+ Square[][] bacgroundPixels;
+ ArrayList<enemy> enemies
+ ArrayList<enemy>()
+ int numEnemies
+ int enemyAppeared

+ void setup()
+ void draw()
+ void mouseClicked()
+ void keyPressed()
+ void createEnemies(int difficulty)
+ void whenImBored()