Please Click Me

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PleaseClickMe

Introduction

PleaseClickMe inspired from usual idle game type especially from "Hero Clicker" game that is play by just click your own mouse and defeat endless monster and grow yourself along with the amount monster you were kill.
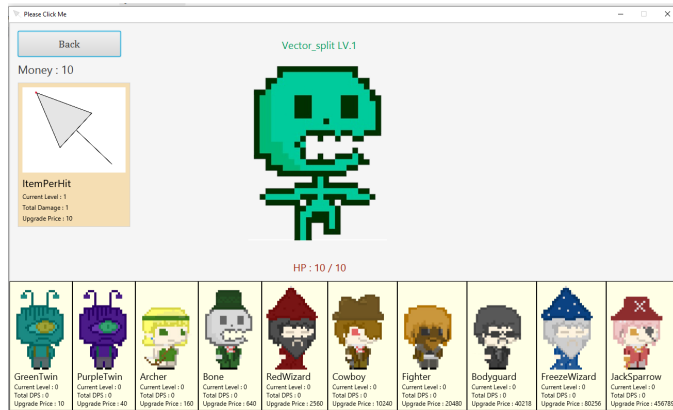
How to play

This gameplay is so simple just click the monster picture you can see and kill it and ,beside upgrade your weapon or hire your companion to help you defeat the monster.
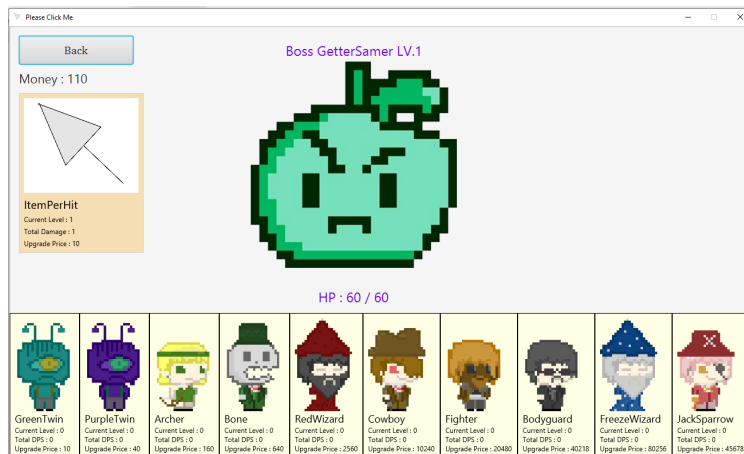
Example
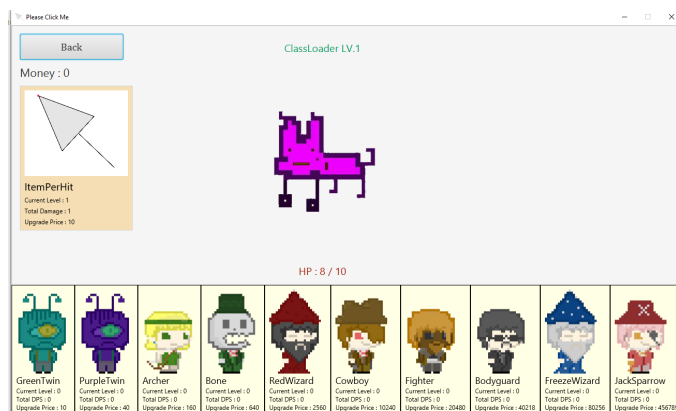
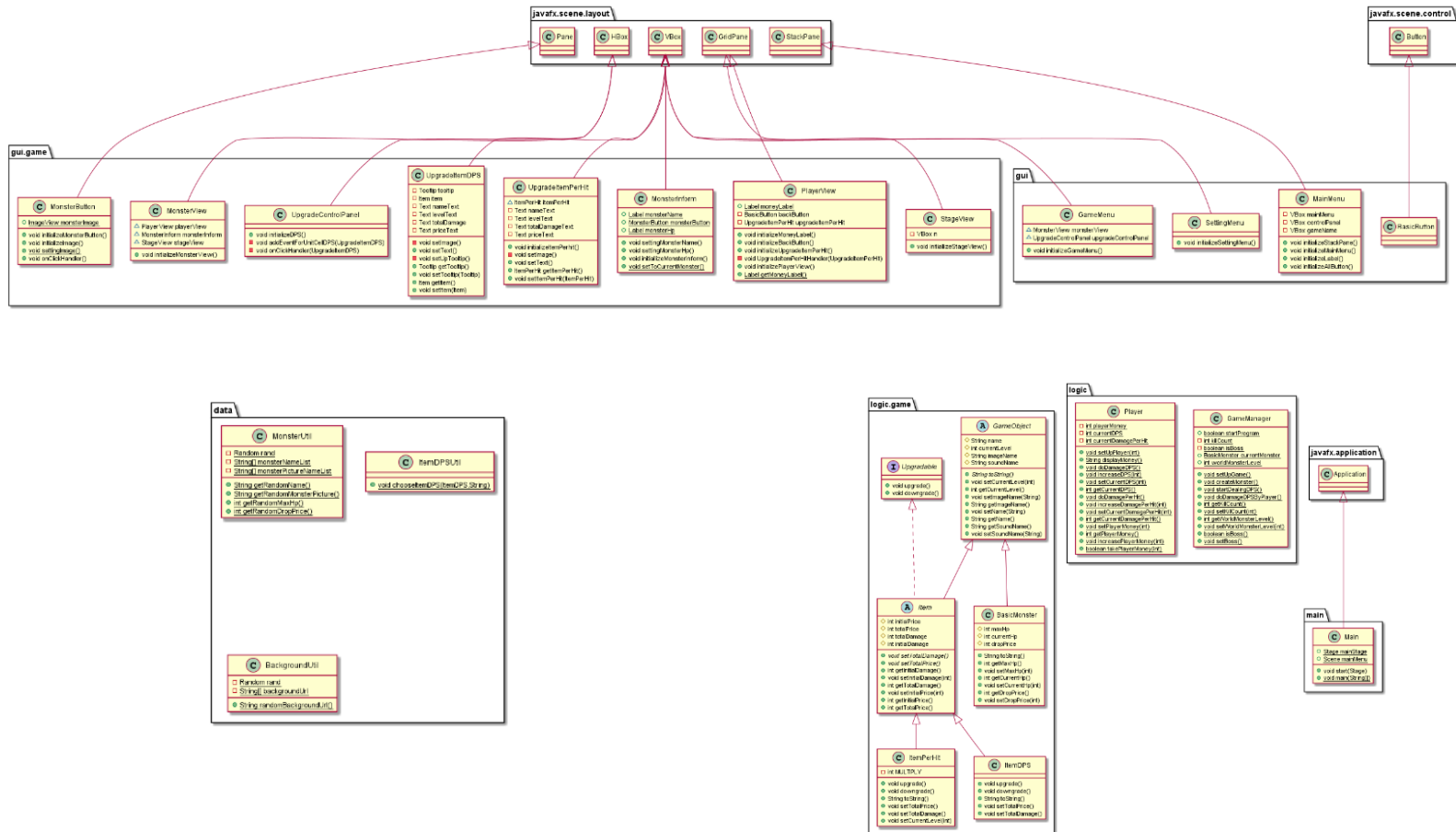- Just click and kill and earn the money then upgrade your weapon.

- When you kill it,Hp below 0, you can earn money from killing it.

- Sometime boss will appear.Just put their life to end and move forward to the endless monster

Class Diagram

1. Package gui

1.1. Class BasicButton extends Button

1.1.1. Constructor

+ BasicButton(String name, int width, int height)	initialize all BasicButton with the same properties with Text name ,pref width ,prefHight ,set font to Cambria size 20

1.2. Class GameMenu extends VBox

1.2.1. Fields

- private MonsterView monsterView;	Top side view in Game Menu Scene
- UpgradeControlPanel upgradeControlPanel;	Bottom side view in Game Menu Scene

1.2.2. Constructor

+ GameMenu()	initialize the create method and add MonsterView and UpgradeContrilPanel to this .

1.2.3. Methods

+ void initializeGameMenu()	initialize all GameMenuwith width 1200 height 800 alignment center and set background color.

1.3. Class MainMenu extend StackPane

1.3.1. Fields

- VBox mainMenu;	be the mainMenu Scene for this scene after the background
- VBox controlPanel;	Control Panel that hold all button
- VBox gameName;	Game label name

1.3.2. Constructor

+ MainMenu()	initialize all MainMenu with background Image and mainMenu to this and add background gif image width 600 height 600.

1.3.3. Methods

+ void initializeStackPane()	initialize this StackPane with width 600 height 600 alignment center and set border.
+ void initializeMainMenu()	initialize mainMenu with width 600 height 500 alignment center and set border. and add gameName and controlPanel
+ void initializeLabel()	initialize gameName with width 600 height 600 alignment center and set border.
+ void initializeAllButton()	initialize all BasicButton startButton that when click with move to gameMenu scene settingButton that when click with move to settingMenu scene exitButton that when click with exit and close the program

1.4. Class SettingMenu extends VBox

1.4.1. Constructor

+ SettingMenu()	initialize all Method and add backButton that can go back to the mainMenuScene

1.4.2. Methods

+ void initializeSettingMenu()	initialize all Setting Menu with width 600 height 500 alignment center and set border with background.

2. Package gui.game

2.1. Class PlayerView extends GridPane

2.1.1. Fields

+ *Label moneyLabel;*	current money label
- BasicButton backButton;	back MainMenu Button
- UpgradeItemPerHit upgradeItemPerHit;	gui upgradeItemPerHit

2.1.2. Constructor

+ PlayerView()	initialize all initialize method in this class and add moneyLabel backButton and UpgradeItemPerHit to this

2.1.3. Methods

+ void initializeMoneyLabel()	initialize moneyLabel with Player current money with Width 200 Height 50 and font size 22
+ void initializeBackButton()	initialize BackButton with width 200 height 50 and when click return to mainMenu Scene
…	…

+	void initializeUpgradeItemPerHit()	Initialize UpgradeItemPerHit and add EventHandler with UpgradeItemPerHitHandler
-	void UpgradeItemPerHitHandler(UpgradeItemPerHit upgradeItemPerHit)	Handler for UpgradeItemPerHit when Player money enough to upgrade this item then upgrade and upgrade ItemPerHit with proper Display
+	void initializePlayerView()	initialize PlayerView with width 250 height 500 with insets 15
+	*Label getMoneyLabel()*	return moneyLabel

2.2. Class UpgradeItemPerHit extends VBox

2.2.1. Fields

-	ItemPerHit itemPerHit;	Tooltip
-	Text nameText = new Text();	this ItemPerHit name
-	Text levelText = new Text();	this ItemPerHit level
-	Text totalDamage = new Text();	this ItemPerHit totalDamage
-	Text priceText = new Text();	this ItemPerHit price

2.2.2. Constructor

+	UpgradeItemPerHit()	initialize all initialize Method in this class setText and setImage then add nameText levelText totalDamage and priceText to this

2.2.3. Methods

+ void initializeUpgradeItemPerHit()	initialize all UpgradeItemPerHit with padding 8 border background and spacing 5
+ void initializeItemPerhit()	Initialize ItemPerHit with proper setting
- void setImage()	set itemPerHit image with its imageName path
+ void setText()	set itemPerHit text with its name
+ ItemPerHit getItemPerHit()	return ItemPerHit
+ void setItemPerHit(ItemPerHit itemPerHit)	set ItemPerHti

2.3. Class MonsterView extends HBox

2.3.1. Fields

- PlayerView playerView;	Left gui
- MonsterInform monsterInform;	Middle gui
- StageView stageView;	Right gui

2.3.2. Constructor

+ MonsterView()	initialize monsterview initialize method playerView , monsterInform ,stageView and add to this

2.3.3. Methods

+ void initializeMonsterView()	initialize all MonsterView with width 1200 Height 500 and set background color

2.4. Class MonsterInform extends VBox

2.4.1. Fields

- *Label monsterName;*	monster name Label
- *MonsterButton monsterButton;*	monster picture
- *Label monsterHp;*	monster Hp

2.4.2. Constructor

+ MonsterInform()	initialize all MonsterInform initialize and add monsterName, monsterButton, monsterHp to this

2.4.3. Methods

+ void settingMonsterName()	initialize new monster name label and setting height 50 width 800 alignment center font size 20
+ void settingMonsterHp()	initialize new monster hp label and setting height 50 width 800 alignment center font size 20
+ void initializeMonsterInform()	initialize all MonsterInform with spacing 10 width 700 height 50 alignment baseline center
+ *void setToCurrentMonster()*	set monsterName and MonsterHp to current monster

2.5. Class MonsterButton extends Pane
2.5.1. Fields

+	*ImageView monsterImage;*	Monster Image

2.5.2. Constructor

+	MonsterButton()	initialize all MonsterButton initialize and add monsterImage

2.5.3. Methods

+	void initializeMonsterButton()	initialize all MainMenu with width 360 height 360 and add eventhandler that will do onClickHandlerMethod
+	initializeImage()	initialize monster image to current monster with width 330 height 330 alignment and preserveRatio true
+	void settingImage()	set this image to current moster if it boss width 360 height 360 is not width 340 height 340
+	void onClickHandler()	click to reduce this monster hp if its hp is 0 or below change to new monster and add monster drop price to player money

2.6.   Class StageView extends GridPane

2.6.1.   Fields

- VBox n	initialize all MainMenu with background Image and mainMenu to this and add background gif image width 600 height 600.

2.6.2.   Constructor

+ StageView()	start initialize Stage View method

2.6.3.   Methods

+ void initializeStageView()	initialize all StageView with width 250 height 500

2.7.   Class UpgradeControlPanel extends HBox

2.7.1.   Constructor

+ UpgradeControlPanel()	initialize all MainMenu with background Image and mainMenu to this and add background gif image width 600 height 600.

2.7.2.   Methods

+ void initializeDPS()	initialize all UpgradeItemDPS with all character
- void addEventForUnitCellDPS(UpgradeItemDPS unitCell)	add event that will start onClickHandler Methods
- void onClickHandler(UpgradeItemDPS unitCell)	if player money is enough to upgrade then upgrade otherwise do nothing.

2.8. Class UpgradeItemDPS extends VBox

2.8.1. Fields

- Tooltip tooltip;	Tooltip
- Item item;	Item
- Text nameText = new Text();	itemDPS text
- Text levelText = new Text();	itemDPS level
- Text totalDamage = new Text();	itemDPS damage
- Text priceText = new Text();	itemDPS price

2.8.2. Constructor

+ UpgradeItemDPS(String itemName)	initialize with item Name and set proper setting

2.8.3. Methods

- void setImage()	initialize all MainMenu with background Image and mainMenu to this and add background gif image width 600 height 600.
+ void setText()	set all file to text label
- void setUpTooltip()	set tooltip
+ Tooltip getTooltip()	Getter & Setter
+ void setTooltip(Tooltip tooltip)	Getter & Setter
+ Item getItem()	Getter & Setter
+ void setItem(Item item)	Getter & Setter

3. Package data

3.1. Class BackgroundUtil

3.1.1. Fields

-	*Random rand*	random
-	*String[] backgroundUrl*	all background url

3.1.2. Methods

+	*String randomBackgroundUrl()*	return random background url

3.2. Class ItemDPSUtil

3.2.1. Methods

+	*void chooseItemDPS(ItemDPS itemdps, String name)*	choose proper ItemDPS setting by name

3.3. Class MonsterUtil

3.3.1. Fields

-	*Random rand*	random
-	*String[] monsterPictureNameList*	contain monsterURL

3.3.2. Methods

+	*String getRandomName()*	get random monster name
+	*String getRandomMonsterPicture()*	get random monster urlPicture
+	*int getRandomMaxHp()*	get random monsterHp
+	*int getRandomDropPrice()*	get random drop price

4. Package logic

4.1. Class GameManager

4.1.1. Fields

+	*boolean startProgram = true;*	start all thread condition
-	*int killCount;*	kill count per level
-	*boolean isBoss;*	is this monster boss
+	*BasicMonster currentMonster;*	Current monster
+	*int worldMonsterLevel;*	world level

4.1.2. Methods

+	*void setUpGame()*	setting for starting program with player money 0 world level 0 kill count 0 setboos() create monster and set both dps and perHit to 0 , 1 and startDealingDps()
+	*void createMonster()*	create monster and upgrade monster to boss if it is boss
+	*void startDealingDPS()*	thread dealing damage to current monster
+	*void doDamageDPSByPlayer()*	do damage
+	*int getKillCount()*	getter & setters
+	*void setKillCount(int killCount)*	getter & setters
+	*int getWorldMonsterLevel()*	getter & setters
+	*void setWorldMonsterLevel(int worldMonsterLevel)*	getter & setters
+	*boolean isBoss()*	getter & setters
+	*void setBoss()*	getter & setters

4.2. Class Player

4.2.1. Fields

- *int playerMoney*	Current player's money,
- *int currentDPS*	Current damage per second done to monsters.
- *int currentDamagePerHit*	Current damage done to monsters when clicked.

4.2.2. Methods

+ *void setUpPlayer(int money)*	Set the playerMoney with money.
+ *String displayMoney()*	return string of money in format "Money : playerMoney"
+ *void doDamageDPS()*	Do damage to monsters with currentDPS and reduce HP of monsters.
+ *void increaseDPS(int count)*	set currentDPS to currentDPS + count
+ *void setCurrentDPS(int count)*	set currentDPS to count
+ *int getCurrentDPS()*	getter of currentDPS
+ *void doDamagePerHit()*	Do damage to monsters with currentDamagePerHit and reduce monsters.
+ *void increaseDamagePerHit(int count)*	set currentDamagePerHit to currentDamagePerHit + count
+ *void setCurrentDamagePerHit(int count)*	set currentDamagePerHit to count
+ *int getCurrentDamagePerHit()*	getter of currenDamagePerHit
+ *void setPlayerMoney(int*	set new playerMoney and check if

playerMoney)	playerMoney is less than zero put it to zaro
+ *int getPlayerMoney()*	getter of playerMoney
+ *void increasePlayerMoney(int money)*	Increase playerMoney by money
+ *boolean takePlayerMoney(int money)*	Check if money is less than zero, return false and show a message to console "Can't Upgrade Item That Below 0" . And Check if money is more than playerMoney return false and show a message to console "Player not have enough Money to Upgrade!!!" . Otherwise Reduce playerMoney by money and return true.

5. Package logic.game

5.1.   Interface Upgradable

5.1.1.   Methods

+ void upgrade()	upgrade by 1 level
+ void downgrade()	downgrade by 1 level

5.2.   Abstract class GameObject

5.2.1.   Methods

# String name	name
# int currentLevel	level
# String imageName	image Url
# String soundName	sound Url

5.2.2. Constructor

+ GameObject()	create name = "nameless" level 0 another null
+ GameObject(String name, int currentLevel, String imageName, String soundName)	create name ,current level ,imageName ,soundName

5.2.3. Fields

+ abstract String toString()	abstract method toString
+ void setCurrentLevel(int currentLevel)	getter & setter with level can't below 0
+ int getCurrentLevel()	getter & setter
+ void setImageName(String imageName)	getter & setter
+ String getImageName()	getter & setter
+ void setName(String name)	getter & setter
+ String getName()	getter & setter
+ String getSoundName()	getter & setter
+ void setSoundName(String soundName)	getter & setter

5.3. Class BasicMonster extends GameObject
5.3.1. Fields

# int maxHp	monster maxHp
# int currentHp	monster currentHp
# int dropPrice	monster dropPrice

5.3.2. Constructor

+	BasicMonster()	constructor
+	BasicMonster(String name, int currentLevel, int maxHp, int dropPrice, String imageName, String soundName)	create name ,current level, maxHp, dropPrice,imageName ,soundName

5.3.3. Methods

+	String toString()	getName() + " LV." + getCurrentLevel();
+	int getMaxHp()	getter & setter
+	void setMaxHp(int maxHp)	getter & setter with can't below 0
+	int getCurrentHp()	getter & setter
+	void setCurrentHp(int currentHp)	getter & setter with can't below 0 and can't exceed maxHp
+	int getDropPrice()	getter & setter
+	void setDropPrice(int dropPrice)	getter & setter with can't below 0

5.4. Abstract class Item extends GameObject implements Upgradable

5.4.1. Fields

# int initialPrice	item initial price
# int totalPrice	item total price
# int totalDamage	item total Damage
# int initialDamage	item initial Damage

5.4.2. Constructor

+	Item()	constructor initial price 0 initial damage 0
+	Item(String name,	by super() and initialPrice and

int currentLevel, int initialPrice, int initialDamage, String imageName, String soundName)	initialDamage

5.4.3. Methods

+	abstract void setTotalDamage()	abstract getter & setter
+	abstract void setTotalPrice()	abstract getter & setter
+	int getInitialDamage()	getter & setter
+	void setInitialDamage(int initialDamage)	getter & setter with can't below 0
+	int getTotalDamage()	getter & setter
+	void setInitialPrice(int initialPrice)	getter & setter with can't below 0
+	int getInitialPrice()	getter & setter
+	int getTotalPrice()	getter & setter

5.5. Class ItemDPS extends Item
5.5.1. Constructor

+	ItemDPS()	constructor level 0 set total price and set total damage
+	ItemDPS(String name, int currentLevel, int initialPrice, int initialDamage, String imageName, String soundName)	constructor super() set total price and set total damage
+	ItemDPS(String name)	constructor by name

5.5.2. Methods

+ void upgrade()	up to 1 level and set total price and total damage
+ void downgrade()	down to 1 level and set total price and total damage
+ String toString()	return "(DPS)" + getName() + "[LV." + getCurrentLevel() + "] DMG:" + getTotalDamage() + " Price:"+ getTotalPrice();
+ void setTotalPrice()	getter & setter with price can't below 0 and calculate with worldlevel
+ void setTotalDamage()	getter & setter with damage can't below 0 and calculate with worldlevel

5.6. Class ItemPerHit extends Item

5.6.1. Fields

- final int MULTIPLY = 2	final int 2

5.6.2. Constructor

+ ItemPerHit()	constructor
+ ItemPerHit(String name, int currentLevel, int initialPrice, int initialDamage, String imageName, String soundName)	constructor super() set total price and set total damage

5.6.3. Methods

+ void upgrade()	up to 1 level and set total price

		and total damage
+	void downgrade()	down to 1 level and set total price and total damage
+	String toString()	return "(On hit item)" + getName() + "[LV." + getCurrentLevel() + "] DMG:" + getTotalDamage() + " Price:" + getTotalPrice();
+	void setTotalPrice()	getter & setter with price can't below 0 and calculate with worldlevel
+	void setTotalDamage()	getter & setter with damage can't below 0 and calculate with worldlevel
+	void setCurrentLevel(int currentLevel)	getter & setter

6. Package main

6.1. Class Main extends application

6.1.1. Fields

+	*Stage mainStage*	mainStage of game
+	*Scene mainMenu*	main menu of game
+	*Scene settingMenu*	setting menu of game
+	*Scene gameMenu*	game play menu

6.1.2. Methods

+	void start(Stage primaryStage)	use GameManager.setUpGame() to set up game and call a constructor of mainMenu, settingMenu, gameMenu

then set Scene with respectively (width, height) |

	mainMenu = (600, 500) settingMenu = (600, 500) gameMenu = (1300,750) set mainStage title to "Please Click Me" and set resizable to false finally add icon with "icon.png", show mainStage
+ *void main(String[] args)*	launch args then game is start

7. Package test

Test logic.game class with proper result

7.1.   TestBasicMonster

7.2.   TestItemDPS

7.3.   TestItemPerHit