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| Hellsten Inc. |
| Slot Machine  Documentation |
| Assignment 2 – Intro to Graphics |
| Version #0.8.1  All work Copyright © 2012 by XX Games.  All rights reserved. |
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**Version History**

# Version 0.1

# - Added utility module (for configuration file access)

# - Added resource class

# - Added init function

# -> Loads from configuration file

# -> Displays pygame window

# -> Loads some of the images use for the interface

# - Added deinitialize, update, and render functions (mostly

unimplemented, render function draws interface image)

# - Added main function, runs and executes the game.

# Version 0.2

# - Added color button images (without text)

# - Added Button class

# -> x y coordinates - mutator + accessor

# -> img reference accessor

# Version 0.3

# - Added text field to button, set and get methods

# - Added new class called slot machine.

# -> Can add and extract components

# -> Can access or change slot machine image

# Version 0.4

#

# - Updated Render class

# -> Updated button render function

# -> Updated slot machine render function

# -> Added draw component function (checks class name and draws

corresponding render function)

#

# - Added threading for button even handling

# - Added Event Handler object

# -> run method implemented

# Version 0.5

#

# - Added meta data on ButtonEventHandler for quick referencing on

the button

# - Added state listeners on the button object (e.g hover, press,

release)

# - Changed run method on ButtonEventHandler to execute event

listeners

# - Added static class ExEventHandler (a storage place for our event

handler functions)

# -> quit\_button\_hover\_listener(),

quit\_button\_release\_listener(), quit\_button\_press\_listener()

# -> reset\_button\_hover\_listener(),

reset\_button\_release\_listener(), reset\_button\_press\_listener()

# - Made the buttons scale and work with even listeners

# Version 0.6

#

# - Added state constants to ButtonEventHandler and a field variable

to keep track of the state.

# This also fixes any issues if two different buttons are set to

the same event handler callback routine.

# - Added flags for release, hover, etc.

# - Added isHovering, isPressed methods

# - Added enable attribute to button class

# Version 0.7

#

# - Removed threading for event handler due to conflicts with pygame

# - Added poll components method for slot machine to sync component

events with main loop

# - Added shutdown method for slotmachine

# - Made Reset and Exit button actually work

# - bet amount and credits now render

# - Bet amount ranges between 1, 2, 5, 10, 25, 50, 100

# - Greyed out spin button if bet amount exceeds credit amount

# - Started implementing reels

# - Added slot\_machine\_brain module for easy referencing. Might not

use exact code.

#

1. **Game Overview**

*The slot machine game works by starting with default 5 reels with Oranges. At the bottom of there will be two buttons. One for spinning the slot machine and another for changing the bet. The spin button is green but turns grey is the user's bet is more than their credits amount. Every time the user clicks the bet button the bet amount increases, following the order: 1,2, 5, 25, 50, 100. When it reaches 100 the next bet goes back down to 1 and continues in the same order. The bet amount is displayed to the left of the bet button and is labelled 'Bet'. Farther to the left is the total credits. If the user clicks the spin button the slot machine will start to spin the reels. There will be an animation starting from the first reel follow by the second, the results are display when the animation is complete and until all 5 reels are animated and finished spinning only than will the winnings be determined. The credits go on forever and the game will only end if the user can not afford anymore more bets or if the user is addictive. At the top right lies the reset button to reset the credits back to 100, bet back to 5, and the winnings back to 0. There also lies an exit button to leave the game. Also a message will show up if the user actually manages to score 5 Sevens.*

1. **Game Play Mechanics**

*The game works by where the user chooses is own bet amount and presses the spin button. If the users credits are below the bet amount than the spin button will be unable and the user either has to choose a smaller bet or click reset. The user can score 3s, 4s, 5s of any outcome, as long as it's on the bet line. The outcome with the least points are Oranges, followed by Banana, Pear, Cherry, Bar, and Seven. If one scores 5 Sevens the player is given the Jackpot.*

1. **Controls**

*The game uses a mouse and uses only the mouse position and first mouse button for interaction with the game. The buttons are most important are directly use the mouse position and mouse button press to perform event handling. The mouse input is configured and access via the PyGame library.*

1. **Interface Sketch**





1. **Scoring**

*The scoring is based around 7 different outcomes (Orange, Banana, Cherry, Bar, and Seven).*

*Formula for winnings*

***Matching 5:***

*Orange – betAmount \* 15*

*Banana – betAmount \* 25*

*Pear – betAmount \* 50*

*Cherry – betAmount \* 100*

*Bar – betAmount \* 250*

*Seven – betAmount \* 500*

***Matching 4:***

*Orange – betAmount \* 10*

*Banana – betAmount \* 17*

*Pear – betAmount \* 33*

*Cherry – betAmount \* 66*

*Bar – betAmount \* 166*

*Seven – betAmount \* 250*

***Matching 3:***

*Orange – betAmount \* 7*

*Banana – betAmount \* 11*

*Pear – betAmount \* 23*

*Cherry – betAmount \* 44*

*Bar – betAmount \* 110*

*Seven – betAmount \* 250*

*Percentages*

*Orange – 35%*

*Banana – 25%*

*Pear – 20%*

*Cherry – 12%*

Bar – 7%

Seven – 1%

1. **Art / Multimedia Index**

*1. red\_button.png*

*2. blue\_button.png*

*3. green\_button.png*

*4. purple\_button.png*

*5. black\_button.png*

*6. slot\_machine.png*

*7. reel\_normal.png*