HANGMAN

SOFTWARE DESIGN AND DEVELOPMENT

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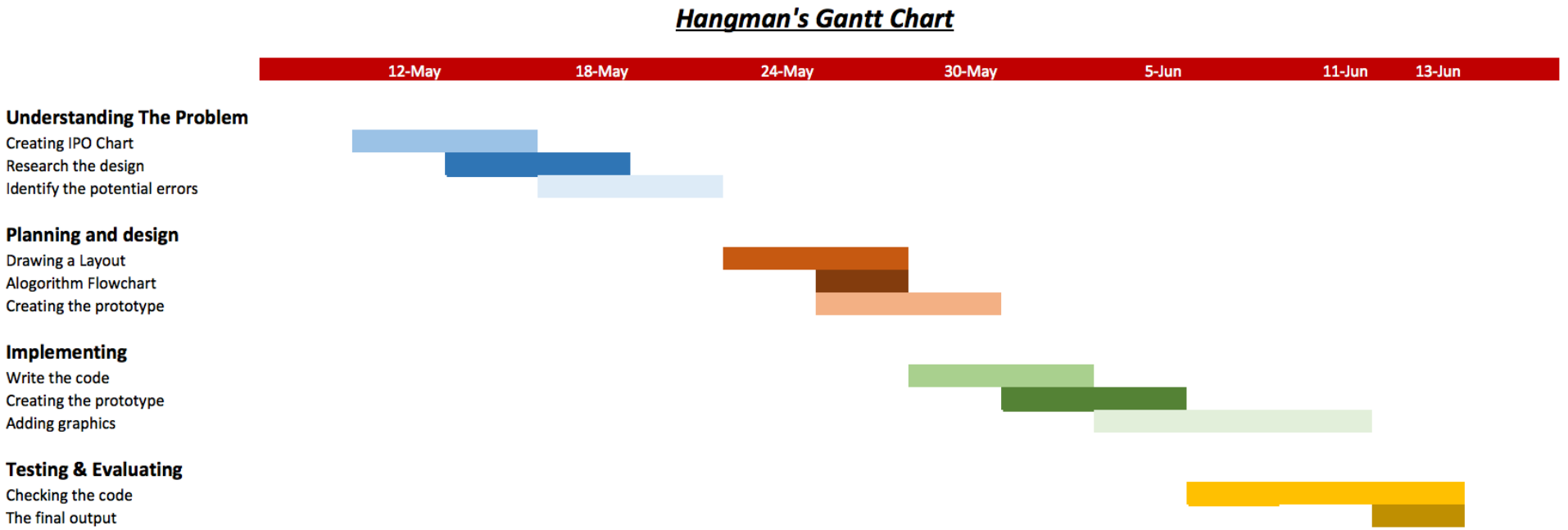
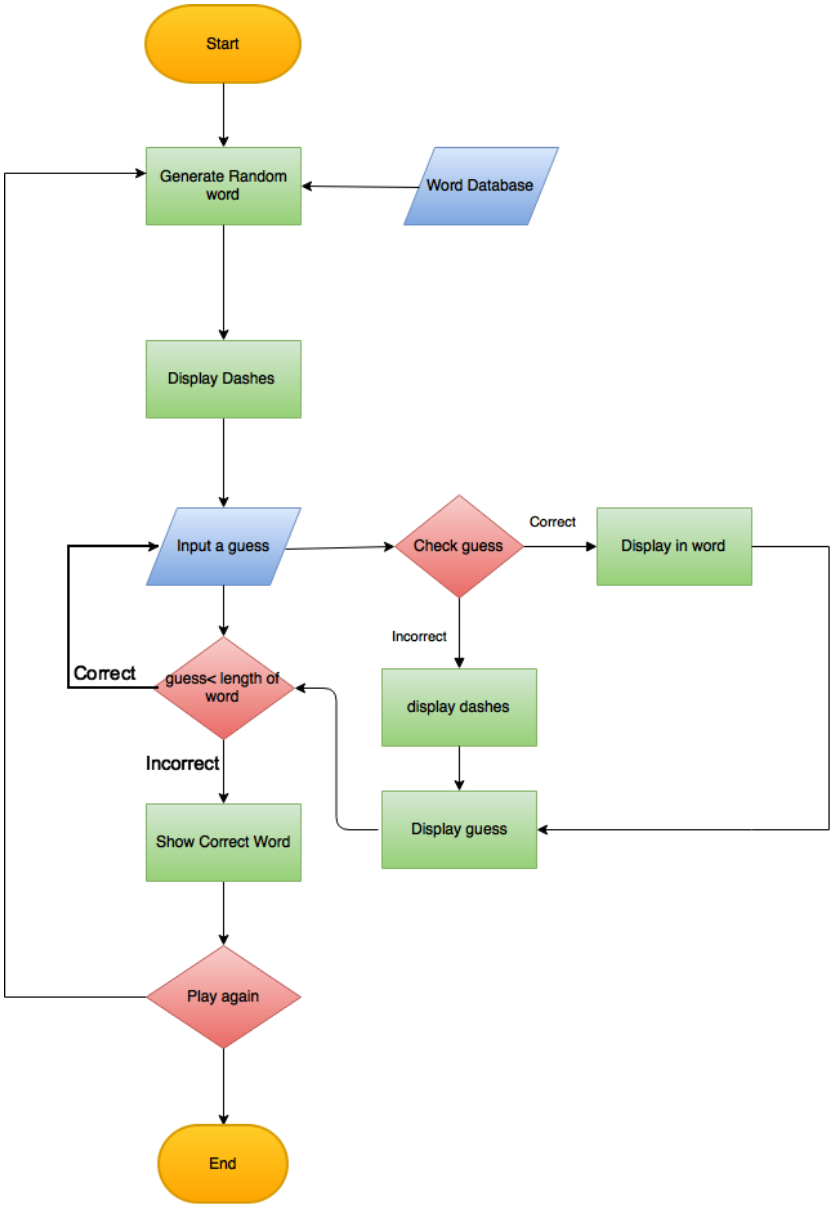
| Year 11 |

Statement of intent-

To create a working Hangman Game with a Graphical User Interface and instructions so that the user is able to access and play the game easily. It is an animation themed based game. In a hangman game, a word is displayed in the form of dashes, and the user has to guess the word. The user is then asked to enter a letter and to guess the word. If the letter is in the secret word it will replace the letter in place of the dash but if it is not, then it is added to the list of tries and a hangman figure appears. The user has 8 chances to figure out what the word is. If he does, then the winning screen is displayed however if he loses then the whole hangman is displayed. The GUI should have a hangman on the left side of the window and the blanks displayed in the centre of the window with the heading at the top and the rules at the bottom.

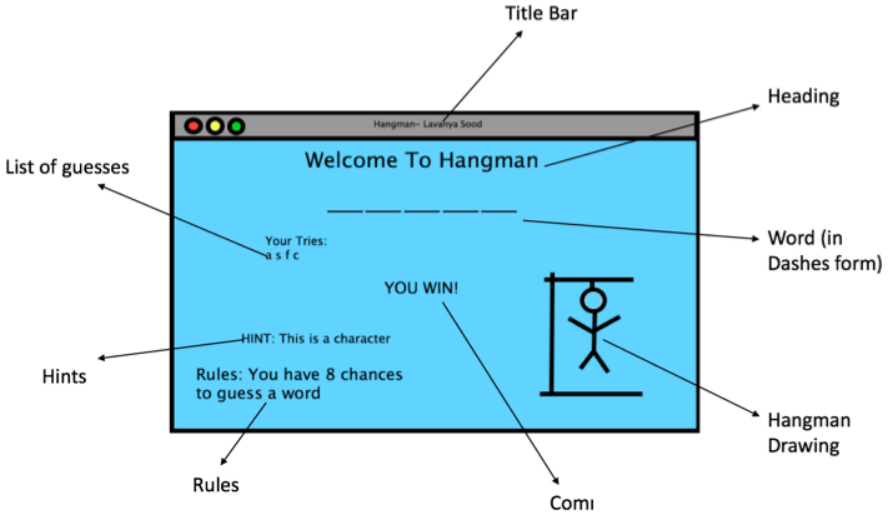


Algorithm Flowchart

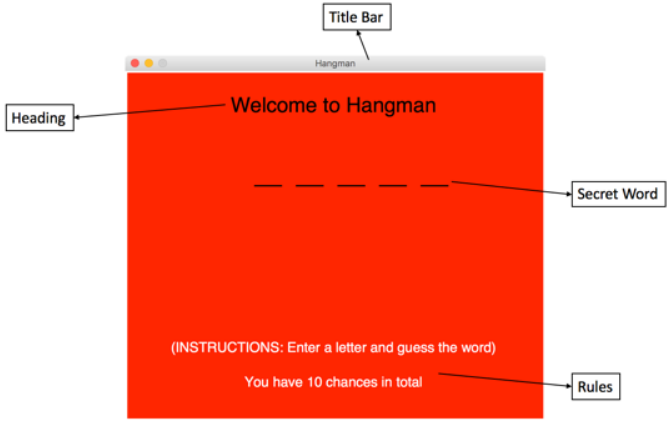


GUI Design

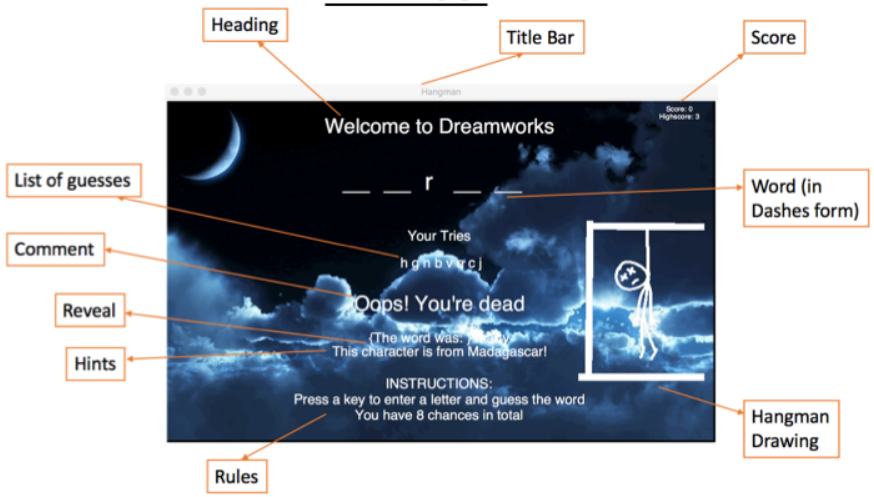
INTENDED DESIGN



BASIC GUI

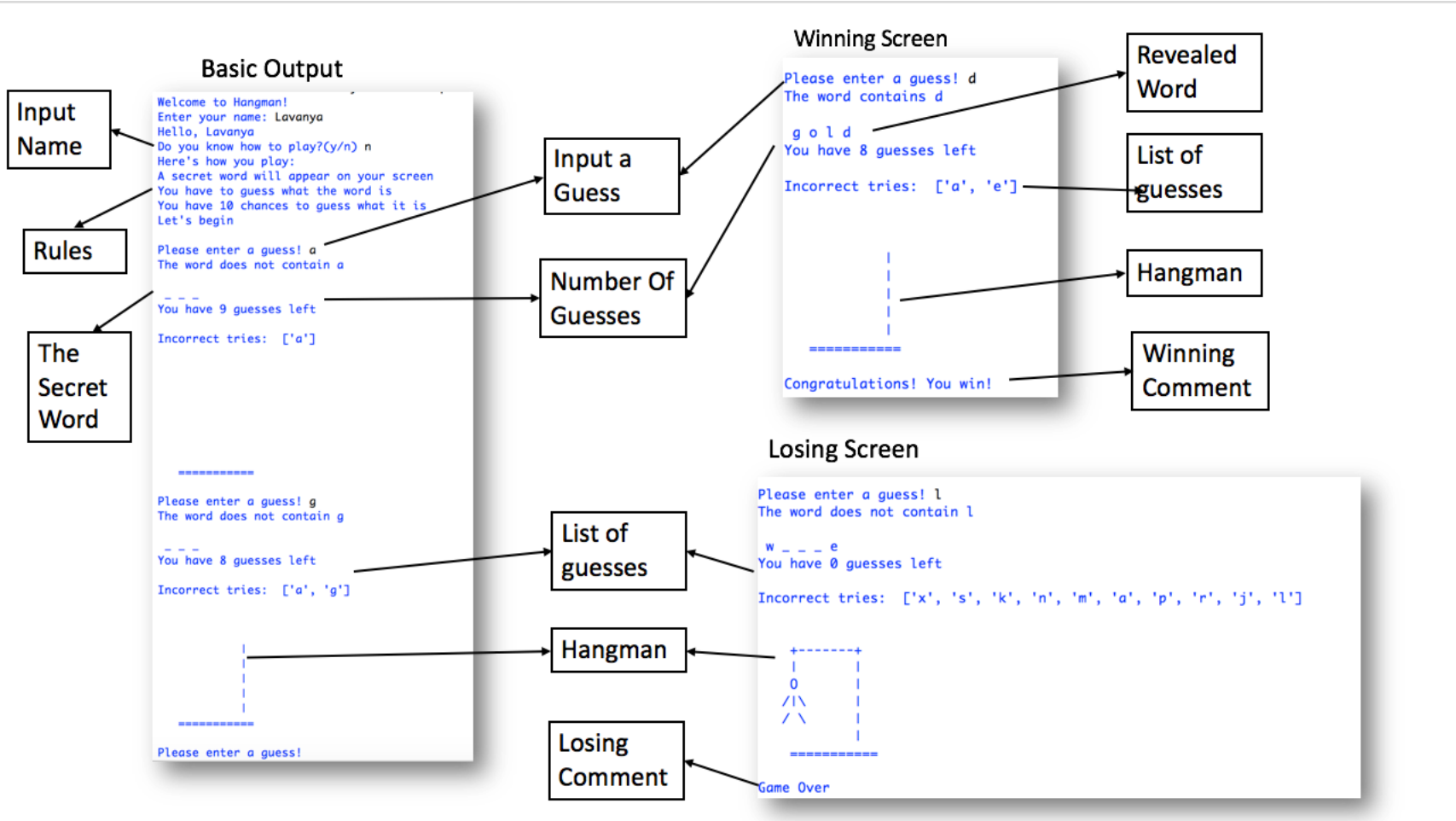


FINAL GUI

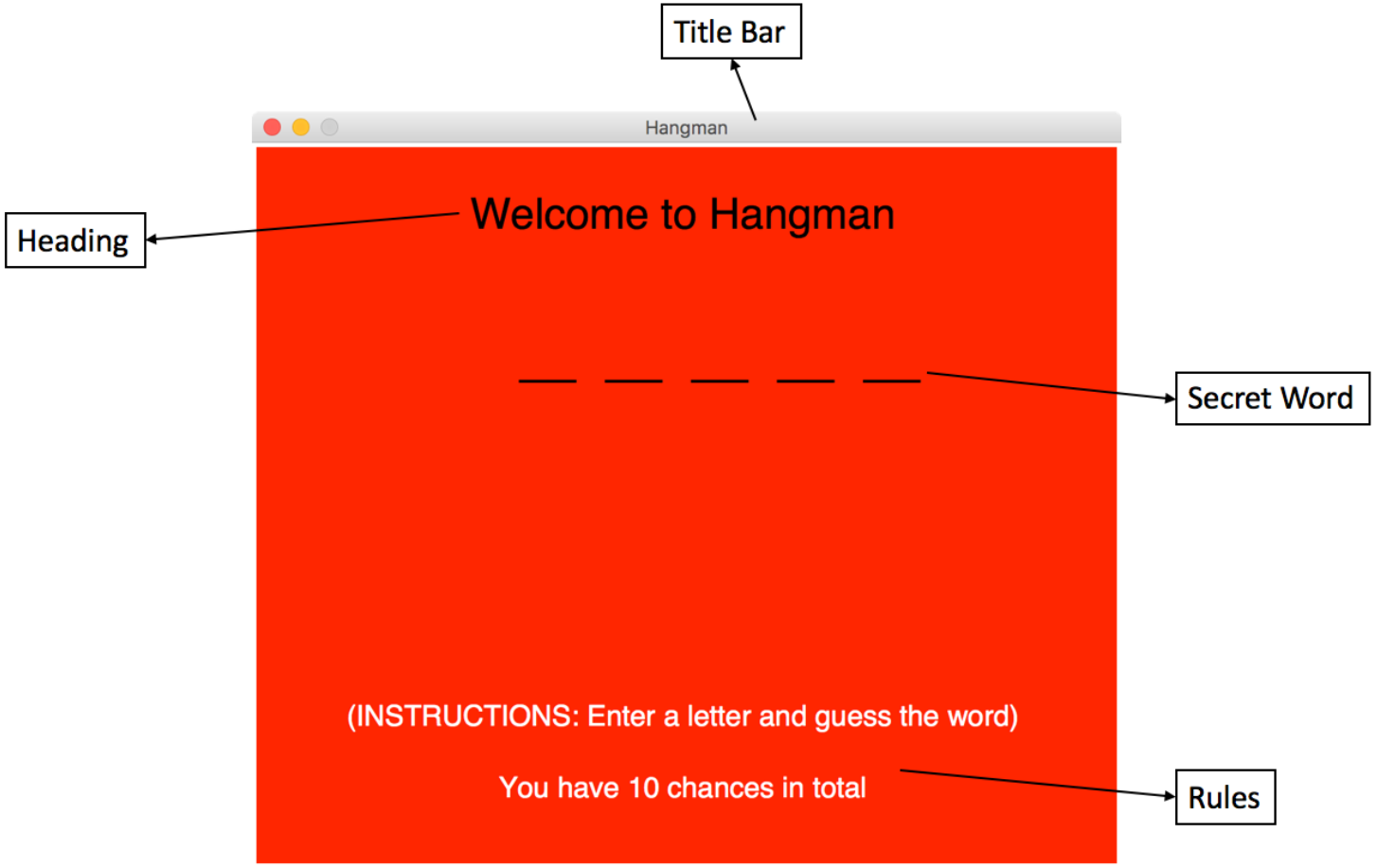


Screenshots showing development

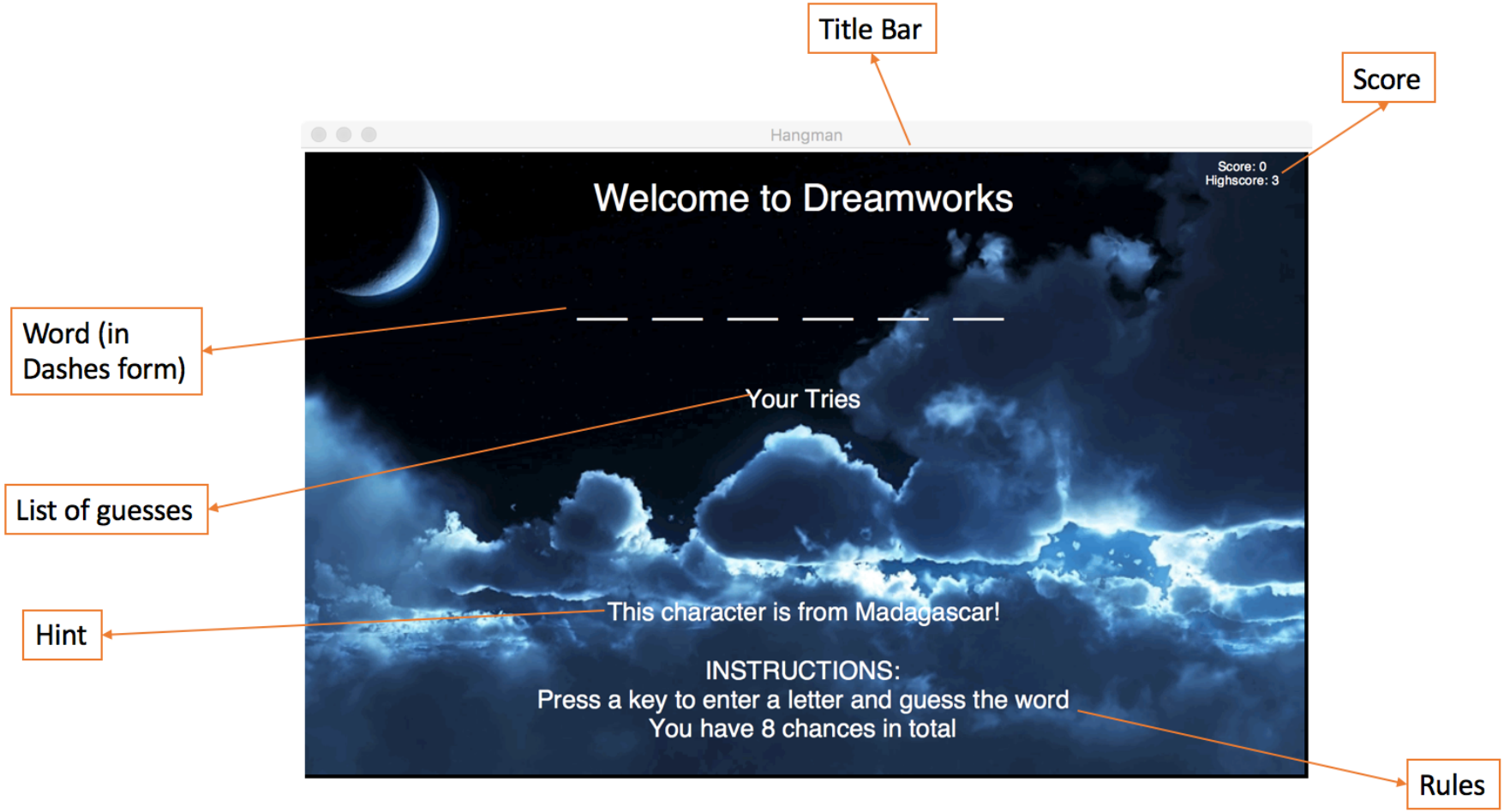
Text Based Hangman (Without GUI):



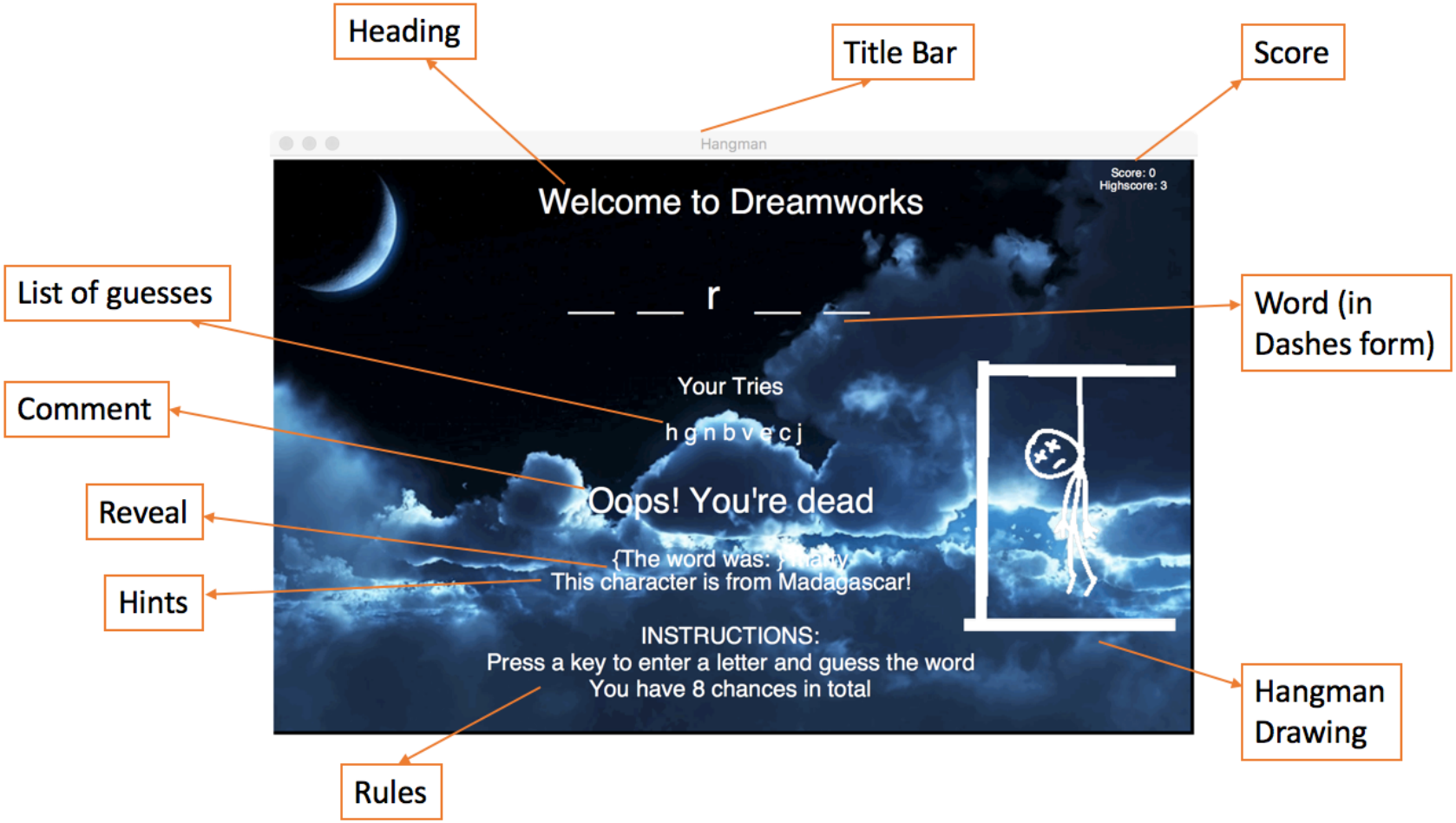
Basic Look with GUI:



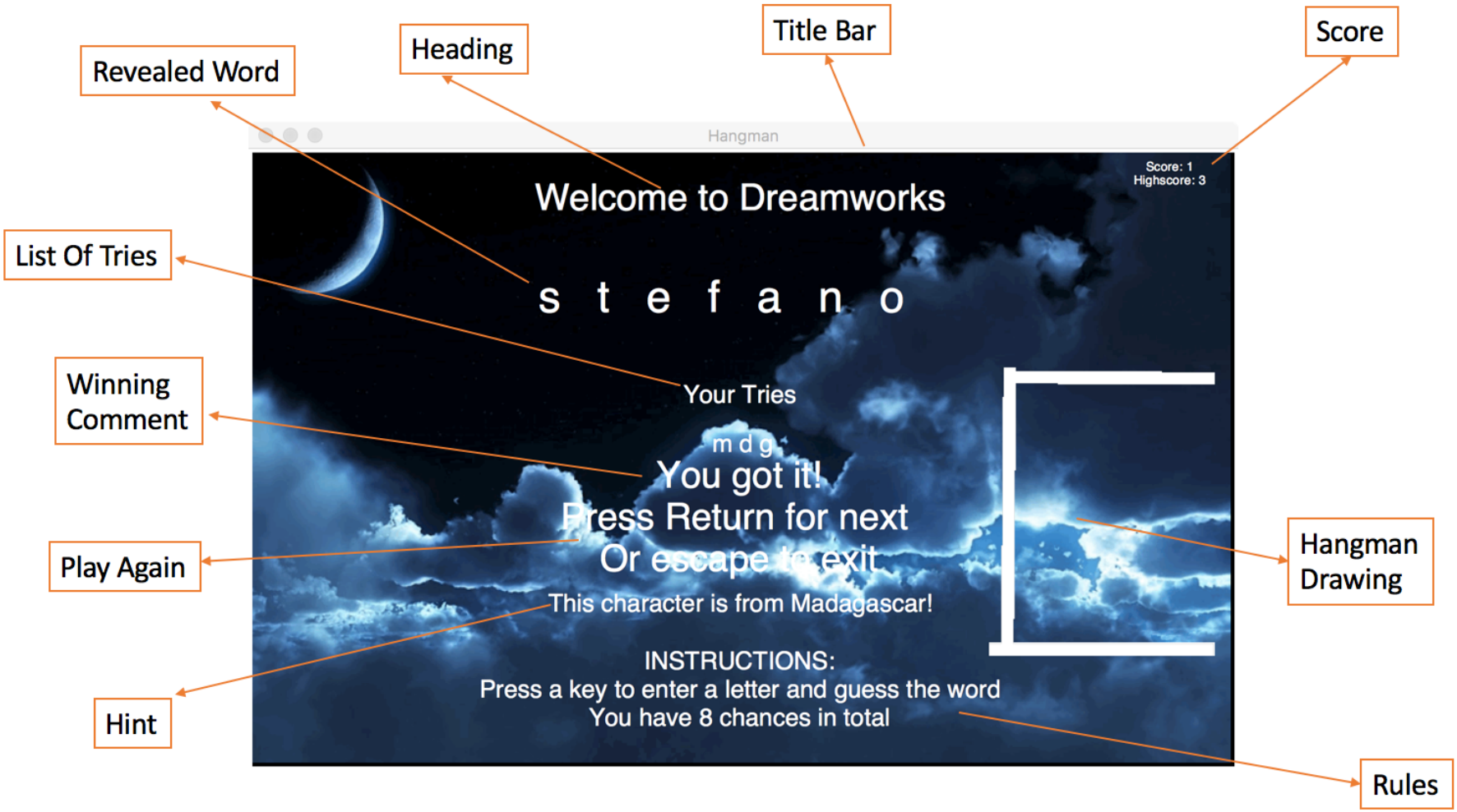
Hangman Basic Look (GUI) with Background:



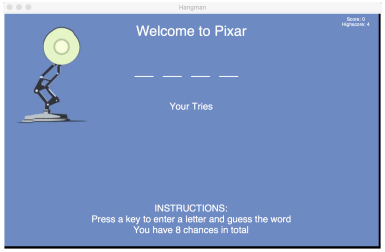
When lose:

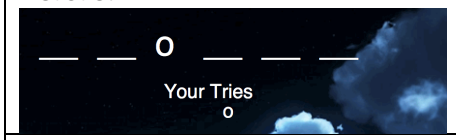
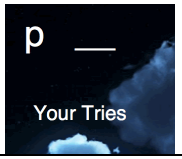
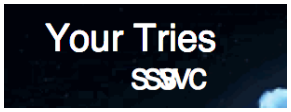
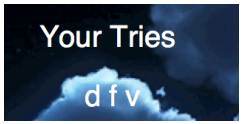

Heading
Title Bar
Score
Hangman
Score: 0
Highscore: 3
Welcome to Dreamworks
List of guesses
Word (in Dashes form)
_ _ r _ _
Your Tries
h g n b v e c j
Comment
Oops! You're dead
Reveal
{The word was: } Harry
Hints
This character is from Madagascar!
INSTRUCTIONS:
Press a key to enter a letter and guess the word
You have 8 chances in total
Hangman Drawing
Rules

When you win:


Revealed Word
Heading
Title Bar
Score
Hangman
Score: 1
Highscore: 3
Welcome to Dreamworks
s t e f a n o
List Of Tries
Your Tries
m d g
Winning Comment
You got it!
Press Return for next
Or escape to exit
Play Again
This character is from Madagascar!
Hangman Drawing
INSTRUCTIONS:
Press a key to enter a letter and guess the word
You have 8 chances in total
Hint
Rules

Testing Documentation:

MODULE	*INPUT*	*EXPECTED OUTPUT*	*ACTUAL OUTPUT*	*SOLUTION*	*SCREENSHOTS*
Selecting A Category	Letter "p"	Open Pixar themed GUI	Open DreamWorks themed GUI	Did not have code checking for letter "p" Added the "if" statements for "p"	Before:  After: 
Input a Guess	Letter "z"	If word is *buzz* Output: B u z z	B u z_	Created a loop for it to check how many times the input letter was available in the word Thus was able to display the letter as many times as it was available in the word.	Before: 
	Letter "o"	If word is *woody* Output W o o d _ (When 'y' was not already guessed)	W _ o d _		After: 

List of Tries (Array Of Tries)	Letter "z"	If in word; display the letter in the word If not in word; display the letter in the list of tries	The word was "Gloria" When "o" is pressed it gets displayed in the word as well as in the list of tries	Created an if statement to check if the letter is already in the array or in the word. Thus it was not added to the the array and was not displayed in the list	Before:  After: 
	Tries list	The list of tries comes in the order the user has entered it	The letters start to overlap and thus the user is not able to properly see which letters he/she has used.	Assigned the variable with 'None' So created an if statement that states that if the variable (i.e. listof_tries) is not 'None' Then un-draw whenever something is available in the tries so that it is available without overlapping	Before:  After: 

Evaluation:

A Hangman Game was created successfully with the GUI. I succeeded in making the letters available and was able to divide the hangman game into two categories, which turned out to be a Pixar themed category and a DreamWorks themed category with a separate list of works for each category. I was able to add a hangman figure and the word to be guessed was displayed in dashes form at the centre of the interface. Due to some extra time I was able to add 2 hints for each of the characters when the user had 2 and 4 wrong tries which would make it easier for the user to guess the letter. I was also able to add a high score to the game so that the user is able to see how many words they are able to guess in a continuous streak. Therefore, I was able to meet the Bonus requirements of the task. I was able to meet the time limit and thus was able to finish the task.