‘Crazy Creatures’

Rich Internet Applications Project Report

Higher Diploma in Web Technologies

NCI

3 May 2013

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Introduction

**Project Scope**

‘Crazy Creatures’ is a short and simple game for young children, ages 4 to 6. There are five stages and then a bonus. The prime objective is helping children develop their natural love of animals, test what animals they recognize and maybe learning the animal’s a name and even how it is spelt.

Along the way there are questions, some of which are related to the animal that will be revealed for that stage, others are unrelated but may enhance the experience by broadening the scope (of purpose?). Some of the questions may be a challenge to the very young but along with adult help a solution can be explained. If playing ‘Crazy Creatures’ by themselves, simple elimination will guide a child to the correct answer and a new fact or word may be learned.

Fun is an important feature of the game thus encouraging progress and learning.

Children are increasingly computer savvy, especially the very young. Natural curiosity and eagerness needs to be fed.

Many online games for the very young have a small interface (usually 600 x 350px), with very little happening. Crazy Creatures makes great use of a full screen, whether on a desktop screen or an ipad the gaming experience is immersive.

This project fixes these problems by…..

**Product Features**

A visual and aural splendor! The intention from the start was that the game would be very fun and making some learning very enjoyable. The term ‘edutainment’ is popular today in terms of describing the merging of learning or education along with some fun and entertainment. There are countless examples of how this is used in today’s classrooms, in children’s books on tv programs and of course children’s gaming.

Some samples here…..we can probably describe the features of one of two of them in detail not just list them all….

<http://learnenglishkids.britishcouncil.org/en/little-kids-games>

<http://www.kidsites.com/sites-fun/online-games.htm>

<http://www.bbc.co.uk/cbeebies/games/>

<http://www.disney.co.uk/disney-junior/content/games.jsp>

<http://www.funwithspot.com/us/website.html>

<http://ie.ixl.com>

<http://learnenglishkids.britishcouncil.org/en/fun-games/teddy-dresser>

this report may be handy for figures on child usage of web…

http://www.dublincity.ie/Community/childrensservicesunit/Documents/EU%20Kids%20Online%20Ireland%20Short%20Report.pdf

A sense of creating a small world was important, an environment the child could enjoy and want to experience again. …

‘Crazy Creatures’ has a lot of colour sound and movement. Qualities that are very appealing to young children. Each stage is distinct from the others through colour, a line of instruction at the top right corner and also the addition of creatures on the left and right sides which bounce depending on mouse position. Palm trees appear to grow and move to the jungle rhythms as the game progresses. All this variety will keep the young user interested and entertained as they play the game.

**The Stages**

The Stages are listed on the right side so it is clear to the player where they are and how far to go…A satisfying green tick will appear beside a stage on completion and moving to the next one…

The first two stages are questions with multiple choice answers.

For example the first question on stage One:

What is a Tiger?

- A Car

- A Food

- A Sandwich

- An Animal

Clearly the wrong answers are very obvious and as an easy intro to the game a young child should be amused that anyone would think A Tiger is anything other than an animal. A simple confidence boost to start with. There is a simple task of creating a creature and to achieve this the child must answer 3 questions per creature. A correct answer will reveal a body part along with a matching animal sound until the creature is complete.

The next two stages involve simple guessing. Stage 3 has a gradual reveal, feet first, of an animal and the child can try guess correctly before the curtain reaches the top. The black and white fur is not a simple give away given the choices presented of bear, panda, cat or dog.

The following stage involves taking a guess on what creature the broken pieces presented may make if pieced back together (will try to have this flip back and forth, horizontal and vertical)….

The next stage is very different again and involves creating 3 creatures with the body parts spread about the screen. Simple dragging to the correct position, hearing a ping sound when it’s been placed right, is just a fun test on animal recognition and also matching shapes and colours. Child is also seeing the name of the animal underneath.

This completes the main five stages of the game. Using a combination of variety and interesting effects and fun sounds it is expected/hoped that a young user will have retained interest thoughout and want to play it again. But wait, before that happens, on completion of stage five a large banner appears declaring (if cookie is enabled name will be shown..) You are the winner! And by pressing here you can play the Bonus! (Bonus to be described elsewhere..?)

**Bonus**

The Bonus feature is a well earned reward after all that hard work! It encapsulates an element of chance by displaying a random head, mid section or legs depending on the red button that’s being pressed. Some results may seem to match in an amusing way and delight a child with the unexpected results. In addition the Crazy Creature body parts they are already familiar with there are additional new arrivals which can be assembled and seen in full if the player desires and doesn’t mind having to press several times to get the correct legs for example. There are no points being generated. But if the player would like to have a go again through the game there is a large button for heading back to stage One and starting again.

**Badges**

Another feature is that at the start of the game the player can see a collection of question marks at the bottom of the screen. The text above the badges ‘Add your Crazy Creatures here’ indicates what will be happening here and as the stages progress the Young player will get some satisfaction from seeing their collection of Crazy Creatures grow. Stage five leading to the creation of three in one go! The shuffle side to side movement of the badges at the start of each stage gives a sense of personality to the creatures and encourages the player to fill all the badges. Making a sort of collection.

**Score**

The score is displayed prominently in a green box on the right side, big number points of 100 are awarded for each correct answer and together with a further 300 bonus points at the end of stage five, the player has collected 2000 points by game end…

*How is this achieved? The scoring system is maintained using JQuery function and variables. The scoring information is stored in a variable and it is updated along the different stages every time the user gives a correct answer. The score is also linked to the display of images, questions and sounds. For instance, questions and answers are stored in an array; we use the score to tell the browser which question and what set of answers to display.*

**Benefits…?**

Secondary benefit of developing computer skills, interface skills, an enjoyable user experience… and anticipation of changing stage, of movement, of being informed…..>? *help children develop their natural curiosity and abilitie: fine motricity, coordination, lateral thinking.*

More from Phillipes template as follows…

**Dependencies**

On external factors, browser compatibility, libraries ie Jquery and Jquery UI, server features etc…

*JQuery library is used to achieve the desired behavior.*

*AJAX is also utilized to display the game in a seamlessly continuum from stage one to finish.*

*The game has been tested and displays well with all its attributes in the following browsers: Google Chrome, Mozilla Firefox and IE.*

**Since the addition of the cookie optimum performance is now offered by Mozilla Firefox, which has no issues in dealing with the cookie. In comparison Google Chrome does not allow for the cookie to be in operation as such the user experience in diminished.**

**It is recommended that for a full experience of crazy creatures that the game should be played in Mozilla Firefox.**

**System Features**

**The system incorporates a cookie which is established in the introduction stage, this is a simple cookie to accept text box information in this instance the player’s name.**

**With this in place the game has become more than a stateless challenge, it provides some personality which will remember the player throughout the course of the game and provide a cheerful message as the player progresses from stage to stage.**

**The cookie in place was the second of the cookies trialed and provides a more pleasant user experience than the first cookie which was tested. The first cookie relied on a window prompt for user input rather than a text box and also did not allow a new user name to be entered unless the cookies had been cleared.**

Repeat the following for each feature..

Descripttion

Stimulus Response sequences…

Lads I guess I;ve prob being doing some of that in previous pages. Perhaps that should be just short intros to the product features and here in this section we elaborate..?

**Other]**

Ideas on further implementation.

**The game provides a general knowledge quiz for the young learner, for further implementation there would be the possibility to introduce specific learning topics such as a mathematics, geography or indeed any required schooling subject this would only require the creation of new stages and the questions to be altered accordingly with this scope crazy creatures offers a great educational tool to parents and teachers.**

**Appendixes**

I guess here would be good to put in reports, feedback etc.

Perhaps we could also describe the project progression over 2 or 3 pages. We have the early sketches and thoughts and just describe problems we met and how resolved fixed thrashed etc..

Also prob no harm in including small screen shots throughout explaining the stages as whoever is correcting may need reminding and it will fill up the 10 pages ☺

*Appendix I*

*The game has been showcased (tested?) with two children of 5 years old and a 4 y/o.*

*The testing’s purpose was to evaluate the following:*

* *Usability*
* *Level of entertainment*
* *Responses*
* *Interaction*
* *Level of difficulty*

*Usability: the game is easy to understand and play. Buttons, links and general orientation is clear and easy to follow. The flow of the game allows for a pleasant experience. Children seemed to specially like the sounds and caricatures moving/hiding to the sides of the game’s container.*

*Level of entertainment: the two children reacted in different ways to the game. The eldest child, who can read, had no issues at all with the early stages of the game (Q & A). The youngest child had a little difficulty as is not able to read, however with the help of an adult who read the questions and possible answers out loud. The child seemed to enjoy the questions and the game in general. The 60 seconds timer in stages one to 3 seemed appropriate for the children to complete the task in hand.*

*Responses: all levels were passed with different levels of ease. The eldest child particularly enjoyed finding the right answer to questions in stages one to three.*

*The youngest child preferred to play with the jigsaw style stages 4 to 6.*

*Interaction: the game allows for plenty of user interaction, not only the quiz or jigsaw part of it but in particular the many figures and caricatures moving around the sides of the screen.*

*The last 3 stages allows for plenty of user interaction and stimulates creativity.*

*Level of difficulty: as mentioned above, the youngest child demonstrated certain difficulty trying to play stages 1 and 2 ( Q & A ). However this was not a major issue as an adult helped the child by reading out the questions and answers. After playing a number of rounds, the eldest child found that the questions and answers were always displayed in the same order, making the game too predictable, this prompted the developers to randomize the order in which the answers are presented.*

*The youngest child found the latter part of the game more entertaining, whereas the eldest one enjoyed the whole game equally.*

*Conclusion: this test has been very positive as it allowed the developers to fine tune the application. At the time of the first test the application lacked background sounds and some of the visual effects were missing. As well as this the order or the answers was always the same, this being modified after the test.*